The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 293.—Vol. XI.] LONDON: SATURDAY, APRIL 3, 1841. [Price 6d.

SHARES IN MINES, &c.

TO BE SOLD, BY AUCTION, at the Exeter Inn, Tavistock, on Monday, the 5th day of April next, at Three o'clock in the afternoon precisely, the following valuable MINING PROPERTY, viz.:

Two 48th shares in the Conystone Mines, in Lancashire.

Two 112th shares in the Charlestown Mines, in St. Austell, Cornwall.
[Both these have been very productive and profitable concerns, paying liberal dividends, of which there is good prospect of permanency.]

Four 96th shares in Bottle Hill Tin and Copper Mine, in Pympton St. Mary, Devon.
[Considerable returns have been made from this mine; and there is good reason to calculate, from the judicious course of management now adopted, on an increase in the dividends already paid.]

Two 128th shares in St. Blazey Consols Tin and Copper Mine, St. Blazey, Cornwall.
[This is esteemed a very promising adventure; it lies in the vicinity of the most productive mines in the county; is at present making considerable returns, with fair hopes of increase.]

Three 196th shares in East Wheal Friendship Tin and Copper Mine, in Marytavy and Tavistock, Devon.—[That this immediately adjoins the great Wheal Friendship Mine, so abundant in riches, may fairly be deemed a sufficient recommendation of it to the speculator: but it may be added, that its own prospects fully warrant the sanguine hopes of the adventurers to share in the wealth of its neighbour.]

Most of the shares are the property of deceased mining captains, and are sold for the benefit of their executors; their value would fully warrant a much more glowing statement, but the advertiser being satisfied to leave the capitalist to his own inquiries, refers, for inspection, to the several captains and managers; and for further particulars to Mr. Physick, auctioneer, Tavistock.

GLAMORGANSHIRE.—VALUABLE FREEHOLD ESTATE AND COAL MINES.

TO BE SOLD, BY AUCTION, by Mr. M. WHITTINGTON (by order of the mortgagee, under a power of sale), at the Castle Inn, Neath, on Thursday, the 22d day of April next, at Two o'clock in the afternoon, subject to such conditions as will be then produced, unless previously disposed of by private contract, of which due notice will be given, all that MESSUAGE or TENEMENT, FARM and LANDS, commonly called or known as NANSTALLON, otherwise NANSTALLWN, situate and being in the several parishes of Ystradgunlais, in the county of Brecon, and Cadoxton juxta-Neath, in the county of Glamorgan, containing, by estimation, 160 acres, or thereabouts.

The situation of this property is well adapted for the erection of ironworks, having a plentiful supply of coal and iron ore upon the estate, with the command of two fine streams of water. There are six seams of coal, containing, in the aggregate, forty feet, or thereabouts; the seams of iron ore are also very productive, and have been proved to be of a very rich quality. This estate is also of great value, considered as the key to all the minerals under the Drim Mountain, several hundred acres in extent. The property is situate six miles from the Neath Canal, at Aberdulais, and three from the Swansea Canal, at Ynisedwin, to which place there is a ready communication by a railroad, which passes through the property, to the neighbouring quarries of limestone. There is also a valuable right of common upon the Drim Mountain attached to the estate. A small piece of the waste ground, containing sixty perches, or thereabouts, in extent, has been let for a term of which eighty-seven years are now unexpired, at the annual rental of £1, and the estate will be sold subject thereto. An abstract of the powers under which this property is sold will be produced at the time of sale.

For further particulars, and to treat for the purchase, by private contract, apply to Mr. Montague Grover, solicitor, Cardiff; or to the auctioneer, Neath.—All letters to be prepaid.

SOUTH WALES, in the counties of CARMARTHEN and GLAMORGAN.—Important and valuable FREEHOLD ESTATES, containing about 730 acres, and also very valuable and extensive COLLIERIES of ANTHRACITE COAL, with rich seams of IRON ORE, held for long terms of years.

TO BE SOLD, BY AUCTION, by Messrs. BRAY and SON, at Garraway's, on Wednesday, the 28th April, 1841, at Twelve for One o'clock, in three lots.

Lot 1.—The very valuable and desirable FREEHOLD ESTATE, called the THORNHILL ESTATE, with the RIGHT OF WORKING COAL under about 1500 acres of land, including this estate and other lands adjoining. Thornhill is situate in the most desirable part of Carmarthenshire, in the parish of Llandilbie, distant from Swansea fifteen miles, from Carmarthen thirteen, from the port of Llanelly twelve, and Llandilo nine miles, and contains 494 acres in a ring fence. On this estate is a neat Cottage Ornee Residence (one mile from the main coach road from Bristol to Milford), in which the proprietor has resided many years—it contains four neat bed chambers, two servants' ditto, two parlours, hall, ante-room, large kitchen, and servants' hall, with all other necessary and convenient offices, well supplied with water, and contiguous to it is a large and convenient farm yard. The COLLIERY, the principal works of which are situate at Cwm Coch, about one mile from the residence of Thornhill, will be found to be one of the most valuable in the kingdom, combining a large district of country, with uninterrupted way courses, an enormous body of coal, entirely level dry, eight working and six pits already sunk, and railway communication established with a good port and floating dock, distant fourteen miles; there are ten good workable seams, from two to nine feet in thickness, of the very best species of anthracite coal, the superiority of which for making iron is now fully established. The present state of the colliery is such, that 100,000 tons of coal per annum might be worked for the residue of the term with the greatest facility, without any engine power for pumping. A railway terminating at the floating dock, at Llanelly, where vessels of 700 tons may be loaded, has just been completed, and passes within about 100 yards of the main shaft.

Lot 2.—A FREEHOLD ESTATE, in the parish of Llanon, near adjoining to Lot 1, and containing about eighty acres, with the RIGHT OF WORKING COAL AND IRON ORE under about 9 acres of land. Upon this estate is a road side inn, called the Cross Hands, situate on the high road from Swansea to Carmarthen, at which the mail coach changes horses. The right of working iron ore extends under about 300 acres. The coal has been sometime worked, and is of the best description known in the anthracite district. The iron ore is of fine quality, and the position of the property affords great facilities for the erection of ironworks. The railway named in lot 1 passes within about 240 yards of the principal working shaft of the colliery.

Lot 3.—A very valuable FREEHOLD ESTATE, situate at Loughor, in Glamorganshire, containing 176 acres of the richest marsh land. It is bounded on one side by the navigable River Loughor, and is in the immediate vicinity of the town, in a very rising mineral district.

Particulars may be had of Messrs. Bicknell, Roberts, Finch, and Neate, 17, Lincoln's Inn-fields; at the Ivy Bush, Carmarthen; Mackworth Arms, Swansea; Bush Inn, Bristol; York Hotel, Manchester; Hen and Chickens, Birmingham; Exchange, Liverpool; Royal Hotel, Edinburgh; Buck's Head Hotel, Glasgow; Royal Hotel, Dumfries; Tontine Hotel, Sheffield; Royal York Hotel, Southampton; and at Messrs. Bray and Son's offices, 29a, High Holborn.

The property may be viewed on application to Mr. Jacob Davies, at the Cross Hands Inn, or at the house at Thornhill.

COLLIERY MACHINERY AND UTENSILS.

TO BE SOLD, BY AUCTION, on an early day, unless disposed of by Private Treaty, all the valuable COLLIERY ENGINES and MACHINERY now in use at ARKLINGTON COLLIERY, near Manchester, comprising:—

One large pumping engine, cylinder 76½ inches diameter, and, by the usual estimation, upward of 200-horse power, with three lifts of pumps, working barrels 16½ inches diameter (one of which is of brass), nine pumping rods 20 yards, three large circular boilers, with flues through them, and everything necessary to an large an engine—in excellent working condition.

One atmospheric engine, with cylinder 36 inches diameter, now pumping water 50 yards deep, with two lifts of pumps, round boiler, and every other requisite.

One winding-engine, 14-horse power, with winding apparatus—Rope and Co.

One 10-horse winding engine, not in use.

One 6-horse high pressure engine, with machinery and rope for winding up an inclined plane, about 700 yards in length.

The railway and twenty-six large waggons, now used for conveying the coals from the colliery to Rochdale Canal, with the branches and sheets, about 30 0 yards in length, and of the same width and construction as the public railways.

Thirteen boats for carrying coals to Manchester, nine of which are nearly new, having been built at the colliery, of the best materials and workmanship.

A large quantity of cast iron pit rails and waggons, of the best construction.

Twelve horses, with their gears, and six carts, together with all the tools and materials used about the concern.

May be viewed at any time, on application at the colliery, which is situate about four and a half miles from Manchester, on the road to Rochdale.

TO BE SOLD, BY PRIVATE CONTRACT, that extensive coal field, known as the HAZLERIGG COAL MINES, together with the long established, and valuable carried going colliery, called FAWDON COLLIERY, situated about three miles north of Newcastle-upon-Tyne, with all the fixed and moveable stock thereon.

The coal, which is the High Main, or Wall's End seam, is of excellent quality for domestic purposes, and has been well known in the London and coast markets for the last twenty-six years as "Newcastle's Wall's End." A new winding engine, competent to lower one and two years ago, and a pumping engine erected thereon, considerably more than competent to the fullest requirements of the colliery, and the outlay will be counted in the winning of new portions of coal to this colliery for a long period of years. The great extent of the Hazlerigg coal field, comprising almost 4000 acres, affords the opportunity of establishing other valuable collieries.

For further particulars, applications may be made to Mr. James Easton, the colliery viewer; to Mr. Thomas Forster, Hazlerigg colliery; to John Wilkinson, Esq., solicitor, Hull; to Messrs. Bell, Brodrick, and Bell, solicitors, New Church-yard, London; or to Messrs. Carr and Jobling, solicitors, Newcastle-upon-Tyne.

Newcastle, November, 1840.

TO BE SOLD, a VALUABLE COLLIERY, held under leases at moderate royalty rents, and situated in South Wales, about two miles distant from a good port, to which ships of the largest class resort for coals, and to which there is a good railway from the colliery. The coal is of an excellent quality, and renowned for household purposes, steam-engines, manufactories, copper works, foundries, &c., of which there are several in the immediate neighbourhood. There are two veins of coal, extending over about 300 acres, and all the necessary pits, levels, &c., are opened, and proper engines are erected for the full working of the colliery. The quantity of coal sold during the last year amounted to nearly 31,000 tons, upon which a good profit was realised; and the sale may be considerably increased by the exertions of an active proprietor—as, for example, in the London market, where the coals are hitherto unknown, but for which they are extremely well suited. The engines, machinery, &c., to be taken at a valuation, and the stock on bank (which is small) at the working price; and, if required, a part of the purchase money may be allowed to remain on mortgage of the property. For further particulars, apply to Messrs. Dunn and Dobie, solicitors, No. 2, Raymond-buildings, Gray's Inn, London.

TO COAL and IRON MASTERS—The GELLYHIR ESTATE contains upwards of twenty veins, varying in thickness from two to six feet each of superior coal, with an abundance of rich iron ore, covered by a surface of more than 1400 acres, and is advantageously situate with regard to the ports of Swansea and Llanelly, and the navigable river Burry. It is confidently submitted that this estate contains the richest seams of coal and iron ore in the South Wales mineral district, and the proprietor having determined on allowing this hitherto unproductive part of his property to be worked and brought into full operation, is willing to receive PROPOSALS for a lease or leases of the minerals from any company of gentlemen who may be desirous of availing themselves of the opportunity now afforded of investing capital at an immense and certain profit.

Further particulars may be obtained of the proprietor, N. Cameron Esq., Swansea; of Mr. D. S. Beckett, 6a, Lincoln's Inn-fields, London; and of Mr. Charles Bailey, Manor-office, Cheltenham.

BLACK JACK.—FOR SALE, at Moorswater, near Liskeard, at the head of the Liskeard and Looe Canal, about TWO HUNDRED TONS of BLACK JACK, from Wheal Gill Mine. For price and other particulars, apply to Crouch and Dymond, Penzance.—Penzance, March 29.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that a DIVIDEND OF ONE POUND per share will be paid to the holders of certificates in this company, at the offices of the association, 26, Austin-friars, on and after the 6th of April next, between the hours of Eleven and Three o'clock. The proprietors are requested to leave their certificates at the office for examination three clear days before the day of payment.

26, Austin-friars, March 30. WILLIAM LECKIE, Sec.

GREAT WHEAL CHARLOTTE MINING ASSOCIATION.—The resolutions for raising additional capital, having been resolved upon at the Special General Meeting, held for that purpose, on the 13th of March, and confirmed at another Special General Meeting on the 29th of March, the directors therefore give notice, that every holder of Great Wheal Charlotte Mining shares is entitled to the pre-emption of two new shares for every five old ones, on the PAYMENT of FIVE SHILLINGS per share, on or before the 14th April, and the same sum on the 14th May, the 28th June, and on the 31st July next, subject to profits, rules, and regulations, of all other shares on which Fifty Shillings per share has been paid.

Laurence Pountney hill, March 30.

IMPERIAL BRAZILIAN MINING ASSOCIATION.—Notice is hereby given, that the TRANSFER BOOKS will CLOSE on the 15th inst., and RE-OPEN on the next day after that of the General Meeting in May, of which due notice will be given. GEORGE THOMAS, Sec.

Winchester House, April 1.

THE MINERS' COMPANY.—The court of assistants of the Governor and Company of Copper Miners in England hereby give notice, that the ANNUAL GENERAL COURT for the election of governor, deputy governor, and assistants, for the year ensuing, will, pursuant to charter, be held at the office of the company, 57½, Old Broad street, on Tuesday, the 6th of April next, at Twelve o'clock precisely. They further give notice, that such General Court will likewise be on Special affairs. By order of the court of assistants,

Office of the Governor and Company of Copper Miners in England, March 18. W. INGLIS, Secretary.

WHEAL WALLIS MINE.—Notice is hereby given, that the directors of the above mine have this day made a CALL of FIVE SHILLINGS per share, to be paid into the Manchester and Liverpool District Bank, on or before the 9th day of May next. The managing director is empowered to endorse the scrips on production of the banker's receipt.

By order of the directors,

8, Market street, Manchester, March 31. W. PIPE, Managing Director.

BAHIA STEAM NAVIGATION COMPANY.—Notice is hereby given, that the ADJOURNED GENERAL MEETING of the 29th June, 1840, of the proprietors of this company, will be held at the George and Vulture Tavern, George yard, Lombard-street, on Monday, the 5th day of April, 1841, at Eleven for twelve o'clock at noon, to receive the further report of the directors upon the affairs of the company, and to elect two directors, in the place of Messrs. Richard Thornton Brown and Joseph Lidwell Heathorn. Particulars as to the qualifications, &c., for the direction, may be obtained at the company's office.

By order of the board,

CHAS. SAUNDERSON, Hon. Sec. and Director.

Lombard street-chambers, Clement's-lane, March 12.

BAHIA STEAM NAVIGATION COMPANY.—Notice is hereby given, that, in consequence of the failure in June, 1840, to elect directors in the place of those going out of office by rotation, a SPECIAL GENERAL MEETING of the proprietors of this company will be held at the George and Vulture Tavern, George yard, Lombard street, on Monday, the 5th day of April, 1841, at Eleven for Twelve o'clock at noon, to follow the Adjourned June Meeting, for the election of two directors, viz. Messrs. John Benson and Lewis Manse, who go out by rotation, but who being eligible, under the provisions of the Deed of Settlement of the company, offer themselves for re-election.

Notice is hereby further given, that, in consequence of the resignation of the two auditors, Messrs. H. C. Dobree and David Cannan (the latter of whom would otherwise have gone out by rotation), the same Special General Meeting will also be held for the purpose of appointing two auditors to fill such offices respectively. Particulars as to the qualifications, &c., for the direction and auditorship, may be obtained at the company's office.

By order of the board,

CHAS. SAUNDERSON, Hon. Sec. and Director.

Lombard street, Chambers, Clement's lane, March 12.

NORTH KENT RAILWAY.—EVERY INFORMATION relative to this undertaking may be OBTAINED by application at the office, No. 42, Lombard street, between the hours of Ten and Four o'clock daily.

ANDREW SMITH'S PATENT WIRE ROPES, for standing rigging, lightning conductors, shrouding of blocks, mining, railway, and general purposes; about half the size and weight of hempen ropes, and 25 per cent. cheaper. Testimonials to that effect, with specimens, may be seen, and every information obtained, at the office, 7a, Old Broad-street, city; 69, Princes street, Leicester square; manufactory, Mill-wall, Poplar; and also of the following agents:—

Fox, Hawkins, and Sutcliffe, New street	Birmingham.
Robertson and Co., 12, Gorse Piazzas	Liverpool.
Matthias Dixon	Newcastle-on-Tyne.
Joseph Bothway	Plymouth.
John Thompson and Co.	Wigan.
T. F. Tregellas	Truro.
Thomas Mooney and Son	Dublin.
Coates and Young	Belfast.
James Liddle and Co.	Glasgow.
James Gunn	Leith.

This rope has been in use for standing rigging in her Majesty's Navy, and in a great number of merchants' ships, for upwards of five years, and is giving the highest satisfaction; the rope is also employed in various mines and railways in different parts of the kingdom, but reference is especially made to the Clackwell Railroad, where its capabilities have been most severely tested, for although it has been in use upwards of eight months, and has travelled a distance nearly equal to the circumference of the earth, it is, to all appearance, as good as when first applied.

THE PATENT SAFETY FUSE, FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the most safe, the speedy, and most expeditious mode of effecting this very hazardous operation. From many testimonials to the confidence with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c., &c.:—

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall.

BRITISH IRON COMPANY.—At a Meeting of the United Shareholders of the British Iron Company, held at 1, Castle-court, Budge-row, Walbrook, pursuant to advertisement, on Friday, the 2d April,

W. J. RICHARDSON, Esq., in the chair.

The following resolutions, having been duly moved and seconded, were unanimously carried: a liberal subscription was immediately entered into in the room, in aid of the existing fund of the united shareholders, and the protest pursuant to the first resolution signed by the holders of a very considerable interest in the company:—

That a protest be signed by the united shareholders, and all others who may agree thereto, warning the directors that they will be held personally responsible if they expend the funds of the company in bringing any actions at law against their co-partners, for the payment of calls.

That an advertisement be inserted forthwith in the *London Gazette*, and two or more of the daily newspapers, declaring that the united shareholders of the British Iron Company disapprove and protest against the proceedings and transactions of the directors, and that the united shareholders hereby notify, that they will not be responsible for the payment of any bills, bonds, debentures, mortgages, or other securities, which they, the directors, trustees, or other officers under their control, may issue, either under the powers of the Act of Parliament of the 3d and 4th of Victoria, cap. 96, or under any other alleged power or authority, or for any debts they may incur, for, or on account of the British Iron Company, upon the responsibility of the shareholders. And the united shareholders hereby warn all persons from taking any such securities, or giving credit upon the responsibility of the shareholders, as the subscribing parties hereto give this public notice, that they will resist the payment of any such liabilities so incurred.

That the trustees of the united shareholders be requested to invite an interview with the directors of the British Iron Company, for the purpose of handing to them the two first resolutions.

That the case and opinion which have been read to this meeting, the latter given by an eminent counsel, in reference to the power of the directors to bring and sustain actions against the shareholders, for the payment of calls, is highly satisfactory, inasmuch as the opinion distinctly and confidently states, that the directors cannot successfully sustain any action against the shareholders for enforcing the calls.

That, should the directors instruct the solicitors to commence any legal proceedings, to enforce the payment of calls against any of the united shareholders, that Mr. T. M. Vickery be instructed to defend such action, and to propose to the directors that one action only shall be brought, which shall decide the question of liability of the shareholders generally.

That this meeting is of opinion, that the only means whereby they can put an end to the liabilities and losses, is forthwith to file a Bill of Discovery for an injunction, a receiver, and for an account against the directors of the company; it is, therefore, earnestly requested, that the trustees of the united shareholders will take immediate steps to carry into effect this resolution.

That a select committee of the House of Commons having been appointed to investigate the proceedings of joint stock companies generally, and to receive evidence thereon, the trustees be requested to offer to give evidence touching the management and general affairs of the British Iron Company.

By order of the trustees,

JAMES BAILEY, Hon. Sec.

OPENING.—GREAT NORTH of ENGLAND RAILWAY.—The public are informed that the GREAT NORTH of ENGLAND RAILWAY was OPENED from YORK to DARLINGTON, for public traffic, on Wednesday, the 31st of March.

The trains will depart at the following hours:—

FROM DARLINGTON TO YORK.

½ 4 A.M.—Taking passengers for London, Derby, Birmingham, Sheffield, and Manchester.

8 A.M.—Taking passengers for London, Derby, Birmingham, Sheffield, Manchester, Leeds, Selby, and Hull.

12 30 P.M.—Taking passengers for Derby, Sheffield, Manchester, Leeds, Selby, and Hull.

3 P.M.—Mail, taking passengers for London, Derby, Leicester, Birmingham, Sheffield, Manchester, Leeds, Selby, and Hull.

6 P.M.—Taking passengers to York.

FROM YORK TO DARLINGTON.

6 A.M.—Bringing passengers from York.

7 20 A.M.—Mail, bringing passengers from London, Leicester, Derby, & Sheffield.

9 35 A.M.—Bringing passengers from Manchester, Leeds, Selby, and Hull.

2 35 P.M.—Bringing passengers from Birmingham, Nottingham, Derby, Sheffield, Manchester, Leeds, Selby, and Hull.

6 P.M.—Bringing passengers from London, Birmingham, Derby, Sheffield, Manchester, Leeds, Selby, and Hull.

Until further notice, passengers will only be booked as far as York, where the carriages are changed.

Until the 6th of April, 1841, the London mail trains will leave York at 8 15 A.M., instead of the hours stated in the time table.

On Sundays only the mail trains run.

FARES BETWEEN YORK AND DARLINGTON.

Passengers—1st class, 12s.; 2d class, 8s.

Carriages—On two wheels, 20s.; on four wheels, 30s.

Horses—One, 2s.; two, 3s.; three, 5s.

Per ice riding in their own carriages, and children under seven years of age, at lower rates.

Carriages and horses must be at the station a quarter of an hour before the departure of the trains; and, to prevent disappointment, previous notice should be given to the station.

The company will not be responsible for luggage, unless it is booked and paid for according to its value; and passengers are particularly requested to have their name and address fully marked thereon, and to satisfy themselves that it is despatched on the carriages.

NEWCASTLE-UPON-TYNE AND CARLISLE RAILWAY.

TIMES OF DEPARTURE AND ARRIVAL OF THE TRAINS.

Leave Newcastle and Redheugh.		Arrive at Carlisle.
Mixed Mail	Half past 5 morning	Quarter past 9
Quick	9 o'clock	12 o'clock
Mixed	12 o'clock	Half past 3
Quick Mail	Half past 2 afternoon	Half past 6
Mixed	5 o'clock	Half past 9
Mixed	Half past 6 for Hepdon Bridge.	
	SUNDAYS.	
	9 o'clock morning	Quarter past 12
	5 o'clock afternoon	Quarter past 9
Leave Carlisle.		Arrive at Newcastle & Redheugh.
Mixed Mail	Half past 5 morning	Quarter past 9
Quick Mail	10 o'clock	1 o'clock
Mixed	12 o'clock	Half past 5
Mixed	Half past 2 afternoon	Half past 6
Quick	5 o'clock	8 o'clock
	SUNDAYS.	
	9 o'clock morning	Quarter past 12
	5 o'clock afternoon	Quarter past 9

FARES.

Quick Train—Close carriages, 11s.; open ditto, 8s. 6d.

Mixed Train—Close carriages, 10s.; open ditto, 7s. 6d.

The doors will be closed five minutes before the time of starting.

Seven coaches run daily between Carlisle and Lancaster (passing through Penrith, which is the direct route for the latter), for Liverpool, Manchester, Birmingham, and London. Steam boats ply regularly between Carlisle and Liverpool, also between Carlisle and Belfast. Coaches daily for Maryport, Whitehaven, &c.

Passengers leaving Newcastle by the Twelve o'clock trains will reach Carlisle in time for the Port Patrick mail for Ireland, by way of Dumfries, &c., and also for the mails to Glasgow and Edinburgh, where they arrive at a Quarter past One next morning; and passengers leaving Edinburgh or Glasgow by the mail at night for Carlisle will arrive there in time for the Ten o'clock train, and reach Newcastle at One o'clock, P.M.—thus saving, in either case, nearly a day, as compared with travelling by the ordinary route.

Places may be secured by the morning and evening mails, and by the North Briton coach for Lancaster, on application at the Railway Station, Strand-on.

By order, JOHN ADAMSON, Clerk to the Company.

Newcastle-upon-Tyne, March 24.

BOLTON AND PRESTON RAILWAY COMPANY.—TENDERS FOR LOANS.—The directors of this company are prepared, under the powers of their Act, to receive TENDERS for the LOAN of MONEY on security of their undertaking, and of the rates and tolls arising therefrom, in sums of not less than £500, and for the terms of three, five, or seven years, on interest at the rate of £5 per cent. per annum, to be paid half yearly at the company's office. The tenders are to express the sums and the term of years for which the same are proposed to be lent, and to be addressed to the secretary at the company's office, Bolton.

By order of the board of directors,

PETER DUCLAIR, Secretary.

THAMES TUNNEL.—Open to the public every day (except Sundays) from Nine in the morning until dark. Admittance, One penny. The entrance is on the Surrey side of the river, close to Rotherhithe Church. The Tunnel is brilliantly lighted with gas. Visitors can now walk under the entire breadth of the river, and up nearly the Middlesex, which is effected by suitable flights of high water mark at Wapping.

By order,

Company's Office, Wapping, Middlesex buildings, Whitecross, March, 1841. J. CHARLIER, Clerk to the Company.

LAW INTELLIGENCE.

SOME OF THE ADVANTAGES OF BECOMING A DIRECTOR.

MIDLAND CIRCUIT—WARWICK, MARCH 26.

BOULTON v. SNAPE.—The plaintiff had been some time ago a respectable surgeon in good practice at Leamington. In 1835 he had the misfortune to become a member and a director of the Leamington Joint-Stock Banking Company, then formed with a nominal capital of 200,000*l.*, divided into 10,000 shares of 20*l.* per share. In 1836 this bank was in difficulties, and the directors and managers borrowed 5000*l.*, for 4000*l.* of which the plaintiff gave his bond jointly with two other persons, and the banking company gave at the same time a promissory note for the 5000*l.* When that note became due the bank could not pay it, having stopped payment, and the London and Westminster Bank, in London, to which the note and bond had come, sued Mr. Boulton, who defended the action unassisted by the company, and recovered a verdict and judgment against him, and his effects were sold under execution. For the sum of 3947*l.*, including the costs, thus recovered from him, and also for damages, he brought his action against the public officer of the said bank. The defence was various, but chiefly that Mr. Boulton owed the bank, for calls on a large number of shares held by him, and that he not only would not pay these calls on his own shares, but encouraged other shareholders not to pay their calls. The defendants also charged the plaintiff with fraud in transferring his shares at a time when he was chairman of the board of directors.

Lord ABINGER told the jury that he was of opinion the transfer of the shares was not legal, though there was no fraud, and that this being an action for damages, the debt due by calls on the shares could not be set off, except against so much of the action as sought to recover a balance due to the plaintiff on his banking account.

A great number of issues having been raised in the pleadings, many witnesses were examined on both sides, and various points of law were strongly contested.—The jury found a verdict for the plaintiff for the sum which he had to pay by force of the execution issued against him by the London and Westminster Bank, but they did not think him entitled to any damages.

SPECIFICATIONS OF RECENT PATENTS.

[From the *Inventors' Advocate.*]

Walter Richardson, gent., Regent street, and George Mott Braithwaite, gent., Manor house, Chelsea, for improvements in tinning metals (communicated by a foreigner), March 17.—This invention relates to a mode of combining nickel and iron with tin, in order to improve the tinning of metal surfaces. The proportions of nickel and iron, mixed with the tin, in order to produce the best tinning, are—ten ounces of the best nickel, and seven ounces of sheet-iron, to ten pounds of tin.

The temperature at which nickel is fusible being higher than that required to bring tin into a state of fusion, it is necessary to prevent the tin as it melts from evaporating (as it is essential that the two metals be put into the same crucible); this object is attained by adding to ten pounds of the composition one ounce of borax and three ounces of pounded glass; the heat soon causes the borax to bubble up, which augments its volume, and causes it to unite with the melted glass without mixing with the metals. The lightness of these two substances in comparison with the metals, causes them to rise to the surface, where they form a crust, which prevents the action of the air on the metals, the fusion of which proceeds under the influence of a concentrated heat. The fusion is completed in about half an hour, when the composition is run off through a hole in the crust. In tinning metals with this composition the workman proceeds in the ordinary manner.

Paul Henonic, solicitor, of Paris, but now of Clement's-lane, London, for improvements in the construction of governors or regulators, applicable to steam engines and to other engines used for obtaining motive power, March 10.—Claim first.—The construction and arrangement of an inflated reservoir cylinder or receiver, supplied with atmospheric air, gas, water, or other liquid, by means of the moving power, the supply of which it is designed to regulate.

Claim second.—The combination of such inflated reservoir or other governor, with a vane or damper in the furnace flue, by which the intensity of the fire is regulated according to the speed of the engine or the supply of steam, which damper may be variously constructed and placed in the furnace flue or chimney, or in front of the furnace, according to the convenience or locality of the engine to be governed.

Claim third.—The peculiar construction of the moveable shuttle, or waste-gate for hydraulic wheels, together with such modifications of the same as may be required in peculiar localities, by which the operation of this or other regulators is rendered available to hydraulic wheels.

The regulator is a frame containing a bellows or elastic reservoir, connected with two similar pieces of bellows underneath it. They are formed of leather, and are secured to horizontal plates or bases by iron straps. The middle plate which separates the reservoir or upper bellows from the lower bellows is fixed, but the two other plates, viz., the top plate of the reservoir, and the plate that separates the two bellows, are moveable. A rod or central shaft rises from the top plate, and to it is fastened a chain, which, passing over a pulley, is attached to a sector provided with a counter weight. This sector is connected with the throttle-valve of the engine, so that any vibration of the sector opens or shuts the throttle-valve, and governs the distribution of steam. A second chain or cord, attached to the central shaft, is carried over other pulleys, and transmits to a vertical shaft and register placed in the flue of the furnace a rotary motion, opening or shutting the flue of the furnace according to the elevation or depression of the reservoir, and thereby regulating the furnace in proportion to the amount of steam consumed.

To the base of the machine are firmly attached two supports, which receive the journals of a shaft provided with a double crank; and a fast and loose pulley, fastened on this shaft, carry a strap from any convenient part of the engine or first mover to be regulated. The cranks on the shaft are provided with connecting rods, which convey a reciprocating motion to two perpendicular rods guided in the ears of the fixed plate, and fixed by pins in the ears of the lower plate, i. e., the plate that separates the lower bellows; so that if any impulse be given to the horizontal or crank shaft, the connecting rods transmit a reciprocating movement to the perpendicular rods, which give an alternate up and down movement to the lower plate.

When the moveable plate is lifted up the air enters the bottom bellows through a valve, while by the same movement the air which was contained in the middle bellows will have been forced forward through a valve into the reservoir, and on the other hand when the lower plate descends, the air which has been received into the interior of the bottom bellows, will be forced forward through a leather pipe into the reservoir, whilst a fresh supply of air will be received into the middle bellows through an horizontal channel in the lower plate. By this means the air is alternately forced forward by each of the bellows to the reservoir.

Thus the principal function of the regulator is to accumulate in a common reservoir the air of two or more bellows, in order that the top plate lifted by the pressure of the air may communicate (according to the variation of the speed of the engine to be regulated) an ascending or descending motion to the central shaft, which communicates by means of cranks, &c., with the throttle-valve of the steam engine, or the shuttle or water gate of the hydraulic wheel.

The escape of air from the reservoir is regulated by a valve safely adjusted. The form of the water-gate is either rectangular, curved, or cylindrical.

GREAT NORTH OF ENGLAND RAILWAY.—This railway (which carries forward the communication from York to Darlington, and completes the chain from the metropolis to the county of Durham) was opened for the conveyance of passengers on Wednesday last, the 31st ult. The 6th of April being fixed by the post-office authorities for the acceleration of the mails from London to the north, and the Great North of England line being included in the mail contracts, all places as far north as Darlington, and indeed beyond, will share in the benefit of the increased rapidity of post-office communication.

MARYPORT AND CARLISLE RAILWAY.—We are informed that the additional part of this railway, leading from the present terminus to the Oughterside coal field to Aspatria, will be opened on Easter Monday. This will afford many advantages and facilities to travellers and to the people of the district; and the company intend shortly afterwards, we learn, to start an omnibus from the railroad at Aspatria to Wigton and Carlisle, for the speedy conveyance of passengers and goods. These things show that the genuine spirit of enterprize now animates the proceedings of this undertaking, which we expect to see go forward to completion with a rapidity and success that will surprise its opponents, but afford the highest delight and gratification to its numerous friends and the public at large.—*Whitehaven Herald.*

LENGTH OF DAYS.—At Berlin and London, the longest day has sixteen and a half hours. At Stockholm and Upsal, the longest has eighteen and a half hours, and the shortest five and a half. At Hamburgh, Dantzic, and Stettin, the longest day has seventeen hours, and the shortest seven. At St. Petersburgh and Tobolsk, the longest has nineteen, and the shortest five hours. At Torneo in Finland, the longest day has twenty-one hours and a half, and the shortest two and a half. At Wardhus, in Norway, the day lasts from the 21st of May to the 23d of July, without interception; and in Spitzbergen the longest lasts three months and a half.

ON THE CONGELATION OF ROCKS.

A very interesting discussion took place on some appearances connected with the congelation of rocks, at the last monthly meeting of the Manchester Geological Society.—Dr. BLACK having recapitulated the principal points in a paper submitted by him at a previous meeting, produced an explanatory diagram, and then noticed the disintegration of the soft sandstone into laminæ, especially that species which was cut up into sandstone slate, which was taken from the upper surface, split up by the workmen, and cut into proper shape for roofing; but independently of this, he said, there seemed to be a change which took place in the surface of the rock, after having been raised or lifted up from the original bed, as if it had been subjected to a severe degree of congelation, intermitted with thawing, till the superficial beds of these strata were loosened one from another, and subsequent thawings made them settle more or less, and very likely a succeeding freezing would still further enable the water to percolate through the interstices, and the stratifications there were found loosened and disintegrated, but still lying parallel to each other. Sometimes angular pieces of four, six, and even up to twelve inches, were found turned about from their vertical axis, and all exhibiting angular projections. Now, he attributed the cause of these appearances to have been a great body of water moving, at some distant period, over the surface of this rock with considerable force, but not with sufficient velocity to have torn the beds loose, as they were found in several directions. These were altogether of the same nature as the subjacent strata, although at first sight they might be supposed to have been rocks brought from a distance; but, upon examination, he found these disintegrated portions to belong to the mother rock below. This body of water had brought with it more or less detritus from other rocks, such as boulders with the angles rounded off, showing that they had been subjected to the action of water. These were sometimes found in the surface above, even from schistose rocks, mixed with those of more recent growth, such as some of the sandstone rocks, the edges being rubbed off. He had also found little stratifications of coaly matter, and in one or two instances transported coal fossils in the diluvium, above the disintegrated portions of rock. The depth of the diluvial deposit above, varied from six inches to six feet; and when the rock approached very near the escarpment, a culminating point of the strata, it would even be bare. The supposition he had suggested would account for many of the diluvial deposits found in mountainous districts, independently of the proof they seemed to him to furnish of congelation. After congelation, the surface of the rock had been covered by the deposit contained in the great body of water moving over it, and tearing up the superficial part of these loose beds, and depositing its own load as it came over. The sand was not in the line of the disintegrated bodies, but horizontal; and the boulders were lying upon it. The disintegrated pieces accumulated at the declivities by their own gravity. He thought the facts adduced altogether confirmatory of the supposition of this body of water having moved over the whole surface of the rock, and produced these different effects, after the rock had been in the state of congelation of which he spoke. One diagram in Mr. De la Beche's work showed such an appearance affecting the slaty rocks in Cornwall; but he did not there say anything of congelation, but attributed it entirely to the surface being covered with water. In conclusion, Dr. Black read a passage, referring to similar appearances, from Mr. M'Laughlan's *Notes to accompany a Geological Map of the Forest of Dean Coal-Field.*

Mr. BOWMAN said, that he thought the appearance so ably described by Dr. Black was not difficult to account for. It was well known to zoologists, that all, or very nearly all, sedimentary rocks possessed distinct lines of stratification; but that these were frequently not apparent, especially in the older formations, till the surface had been for some time laid bare and exposed to atmospheric influences. The consolidation was so great that the divisional planes were not perceptible till the rain, the frost, and the disintegrating agents in the air, had penetrated within and between the beds, and, by oxidising the iron in the stone, had given them a brown rusty hue. He thought, therefore, that large blocks or portions of the rock in question had, in the first place, been thrown out of their natural and conformable position, probably by the erosive action of strong currents; and that afterwards, when left dry, the rain, frost, &c., had acted on these blocks, and separated them into many parallel divisional planes or layers. These were no other than the lines of original bedding, which appeared to diverge upwards in series from the general direction of the stratification, only because the blocks had been disturbed while entire, before they, the beds, were separated; and the latter retained their parallelism, because they were subsequently buried up under a mass of diluvium, which protected them from farther derangement. As this was a very curious subject, and intimately connected with the external characters of rocks, Mr. Bowman shortly alluded to the natural separation of great masses of rock by a series of joints and cleavage planes, which had nothing whatever to do with the original stratification, but generally passed through it either perpendicularly or at a high angle—sometimes uninterruptedly for several hundred feet. The subject was very obscure, till elucidated by Professor Sedgwick; and its cause, especially as regards cleavage, is not yet clearly ascertained, though it is believed to be the result of some magnetic or electrical power, forcibly passing through the mass before its consolidation, and drawing or arranging the particles into one uniform direction, generally diagonal to the surface of the beds, and dipping at a high angle towards magnetic north. Cleavage is most distinct in the oldest sedimentary rocks, becoming gradually less so in the ascending series, till it entirely disappears in the younger or later formations; but it only affects the beds composed of fine particles, passing through coarse grits and conglomerates, without producing any change, and re-appearing in the alternating finer beds. Some beautiful examples of this occur in the Welsh rocks, connected with the paper he was about to read. The cleavage, where most perfect, generally destroys the original stratification, and renders it impossible to divide the mass in that direction. Common roof slate is a familiar illustration, which is always split in the direction of the cleavage. In some slates a streak or line of a different colour, often green, runs across it: this is the true line of bedding; but it is so completely obliterated, that no force, no art, and no length of exposure to weathering, would ever make the rock split in that direction. Joints have a very different origin from cleavage planes, and have originated in the shrinkage or contraction of the mass in passing from the soft into the solid state, exactly as the mud at the bottom of shallow pools splits and cracks in all directions after the evaporation of the water in summer. They are always most numerous and symmetrical in the older rocks, and most perfect in the finer grained ones, and are generally vertical to the surface of the beds. Their horizontal direction has definite, though unknown, connection with the same magnetic pole, for they are infinitely more numerous in that plane than in any other. They occur very copiously in coal, where they are more or less perpendicular to the surface of the beds, and may be recognised by their smooth shining sides, on which may often be traced fine parallel lines, which are sections of the true beds. This may be proved by the layer of soft charcoal which is frequently spread over them where exposed on the sides at right angles with the joints. The subject of joints and cleavage is full of interest, and ought to be more generally studied by practical observers; for it is impossible to arrive at any certainty in examining the older formations without a familiar acquaintance with it.

Mr. C. CLAY said, there was one close like those referred to by Dr. Black very strongly marked, near the town of Stalybridge, where the rock was disintegrated into very small portions, which assumed the form of curves; and the thinner these disintegrations, the more curve the appearances were. If it came to the shale, it was remarkably so; and, in the new cut of the road to Mottram, the shale was perfecting these fossils of the scale. He agreed with Dr. Black in thinking these appearances owing to the action of water after the body of rock had been raised from its original position.—Dr. BLACK said, one thing which led him to suppose that this disintegration was not owing to mere weathering, was the fact that the disintegrated bodies were in a very deep layer, perhaps two feet from the top to the bottom.—Mr. BOWMAN—Of course, the softer the rock the deeper the disintegration.—Dr. BLACK said, the rock was not so very soft—it was as hard as roofing slate. The lamellations were thin, from half an inch to an inch generally. The deposit above had been there for ages, being waste, probably, at a period when the temperature of this country was high, compared with what it now is. There could have been no weathering since the tertiary period.—Mr. BOWMAN thought the frost could not have acted subsequent to the deposit.—Dr. BLACK said, the more filtration of the water could never have shifted the process, and, therefore, the whole disintegration and removal must have taken place before that deposit was made. He mentioned that he had seen an example of this sort on the new Bolton and Preston Railway, upon the edge of the line.

METALLURGIC CHEMISTRY.—A lecture on chemistry—chiefly metallurgic—was delivered by S. Maple, Esq., of Bonvige, at the Truro Institution, on Monday week. The lecturer commenced by speaking of the vast importance of the science of metallurgic chemistry to this county, and expressed his regret at the failure of the proposal for establishing a mining school, for instruction in this and the kindred sciences. He then enumerated the various copper ores, and salts of copper found in Cornwall, and described the principal tests for their detection. On these a great many experiments were performed; and there were also exhibited modes of extracting iron, lead, and silver, when held in solution. Having shown the means of detecting those metals, in chemical solutions, Mr. Maple explained how their presence, as well as that of several other deleterious substances, may be proved in articles of food, strongly urging the importance of attention to this means of preserving health. The presence of arsenic, poisonous or injurious substances was shown by experiment, in water, and in adulterated bread, and wine.

EXPLOSION OF STEAM-BOILERS ATTRIBUTED TO ELECTRICITY.

We mentioned, on a former occasion, in connection with the discovery of the development of electricity from effluent steam, that M. Tassin, an engineer in Belgium, had many years ago conceived the notion that electricity is the cause of the explosion of steam-boilers. We find, in a late Number of the *Fanal*, a more full account of the explosion of the steam-boiler which M. Tassin adduces as confirming his opinion. We translate the account as an instance of the extraordinary effects produced by the expansive power of steam; and as an instance also of ingenious, though, in our opinion, fallacious modes of accounting for these effects, by the assumed operation of other causes. Now that the discovery of the development of electricity by the escape of high-pressure steam is exciting much attention, the cause assigned by the ingenious writer in the *Fanal* may appear to be more feasible than it would otherwise have been considered. For our own part we attach no weight to it whatever beyond that of a curious speculation.

The notion entertained by M. Tassin, that gradual pressure cannot burst an iron vessel, will not be borne out by other experiments. It is very probable that a boiler may be so put together that the rivets and joints may be the weakest parts, but it is also possible for it to be so constructed that the iron will rend before the rivets give way. We have ourselves seen a vessel rent asunder by the gradual pressure of a force pump.

"M. de Marotte possesses a large distillery at Vieux Waleffe, which is worked by a small steam-engine of 8-horse power, and, consequently, has a boiler in proportion. The boiler is a cylinder, four feet in diameter and eighteen feet in length, with a flat bottom, and through the middle of it there is a large fire flue. This form of boiler is much used in Belgium, and which gives general satisfaction.

"Some minutes before the explosion, the proprietor, examining the manometer, which indicated two atmospheres and a half, desired the stoker to raise the pressure of the steam. He, however, replied that it was sufficient for the work that was required at the time. Everything in other respects was acting as usual, and there was an abundance of water in the boiler.

"Scarcely had M. de Marotte reached his house before the whole distillery was destroyed by a tremendous explosion. The boiler was separated in two, on one side the internal flue, about fifteen inches in diameter; on the other side, the main part of the boiler to which the other half of the bottom was attached. The flue, and the half bottom of the boiler attached to it, threw down the base of a chimney nine feet thick, and the walls of four other different buildings that were in its course.

"The main part of the boiler flew off in an opposite direction, passing, in the first place, through the wall of the engine-house, twenty-three centimetres thick—broke the iron beam of the engine as a cannon ball would have done—broke all the machinery that intercepted its progress—overturned the other supporting wall of twenty-three centimetres of bricks—and also the wall of a barn built of bricks, a metre in thickness. But what is still more extraordinary is, that this barn, of the dimensions of ten metres, and heaped up with sheaves of corn to the very roof, was also passed through by the main part of the boiler, which pierced the wall opposite, of equal thickness to the preceding one, but in which, however, it stuck. But this is not all. The bottom of the boiler, to which was attached a small portion of the flue, was blown from the body of the boiler, and killed three oxen in a stable which intercepted its progress; even this was not enough to stop the course of the fragment, which shattered two strong wooden posts twenty-three centimetres thick. The external wall of the stable did not arrest the progress of this part of the boiler, which dashed into the middle of the neighbouring pond.

"All this was the result of electricity. With respect to the effect produced merely by the explosion of steam, a workman who was in a room immediately above the boiler was hurled through the roof to a very great height, and falling in the yard on a heap of sand was killed on the spot.

"Another workman in the interior of the brewery, which was at a considerable distance from the boiler, and who was looking towards it, was thrown to a distance of fifteen feet against an open door by which he supported himself. This man declares that the boiler appeared surrounded by vivid lightning.

"It is the province of natural philosophers to explain this phenomenon, which renders all the methods of security hitherto invented to prevent explosions unavailing, and particularly the one which has been adopted in Belgium, for the security of our neighbours, which consists in building a party wall two metres thick. We will hazard the following explanation:—Every decomposition or change of condition in a body evolving electricity, the evaporation of water must also produce it; but as steam-boilers are never entirely insulated, the electricity returns to the general reservoir, as soon as it is formed. But is it not possible that the great number of copper pipes in connection with the boiler in this distillery may have served as reservoirs of electricity that was accumulated within them? Is it not likewise possible that a workshop, paved with asphaltum, might have the effect of insulating all the tubes, boilers, stills, &c., which are used in a distillery, and that hence all these apparatus charged with electric fluid at the highest tension may have caused the terrible explosion, the consequences of which we have just related?

"It must be observed, that as the discharge took place from the interior of the boiler, it was not the lightning alone that produced the effect, but the lightning armed, as it were, with the two portions of the boiler. The lightning alone certainly could not produce such effects.

"If this hypothesis be sound, we must correct all our notions, and all the methods at present adopted for obtaining security against the explosion of boilers; for, according to what follows, it would appear that all such explosions are the effects of electricity, and are never occasioned by a progressive pressure, to guard against the effects of which such great and useless precaution is taken. Some experiments, made by M. Tassin, tend to prove this assertion. That engineer is now persuaded that it is impossible to burst a boiler by progressive pressure.

"Having filled a globular boiler of sheet iron, a quarter of an English inch thick, with water, he proved it with a force pump to thirty-six atmospheres of pressure. Having arrived at that point the manometer began to fall, notwithstanding the pump was kept at work. He observed that a fine vapour exuded from every part of the boiler, and fell down like a mist. This effect is explained by the extension and opening of the different layers of iron, and the stretching of the holes of the rivets, which become oval during the expansion of the iron plates, and allow more water to escape than is forced in by the pump. M. Tassin perceiving that he could not burst his boiler made with thick iron plate, fixed over the man-hole of another boiler, by a number of screws, a plate of iron, only a line in thickness. When it was subjected to an enormous pressure, the iron plate became convex, the holes of the screws were enlarged, as in the preceding experiments, and the water escaped faster than it could be pumped in. He substituted a thin sheet of tinned iron, with the same result; so that this engineer is now convinced, that owing to the tenacity of iron, it is impossible for an explosion ever to take place from a gradual increase of pressure in a boiler. He is likewise of opinion that no explosion can result from the gradual introduction of water into an empty and red-hot boiler, because he has many times repeated that dangerous experiment, the effect of which has been only to produce a contraction of the surface when cooled. He, therefore, refers all explosions of steam-boilers, with very few exceptions, to electrical discharges." These experiments are said to have been made by M. Tassin ten years ago.—*Inventors' Advocate.*

JOINT-STOCK MANIA IN BELGIUM.—It appears by Mr. E. Tennent's new work, *Belgium*, that there has been a mania for joint-stock speculation in that country scarcely equalled by the bubbles of 1825 in Great Britain, and attended with equally ruinous results. It will scarcely be believed (though it appears to be a fact) that between 1833 and 1838, 150 or 160 companies actually invested 350,000,000 f., or about 15,000,000*l.*, in speculations—for insurances, mines, machine making, public works, export associations, glass manufactories, sugar refineries, cotton and flax mills, printing, brewing, in short, every imaginable undertaking that could be described in scrip. The mania originated with some similar undertakings projected by the King of Holland, but which, being prudently conducted, were moderately successful.

COAL IN INDIA.—We learn, by the *India Review*, just received, that a large vessel (the *Clarendon*) is employed to convey coal from Mergui to Singapore, and that the coal is fully expected to answer; the colliery, it appears, is now in full operation.

MINING CORRESPONDENCE.

FOREIGN MINES.

REAL DEL MONTE MINING COMPANY.

[The statement of accounts that appeared under this head, in our last, was that of the Bolanos Company; the error, however, would at once be perceptible to the reader, from the nature of the despatches that follow. We are happy to state, there has been a monthly increasing profit since October, and that the total losses of the company for the year do not exceed £70,000.]

BOLANOS MINING COMPANY.

[The following accounts were erroneously printed, in the Journal of last week, as those of the Real del Monte Company; we here repeat them, as the most satisfactory course for both companies.]

General Summary of Accounts for 1840.

Date.	Quantity raised. Mcs.	oz.	qr.	Value. £	rs.	c.	Costs. £	rs.	c.	Loss. £	rs.	c.
January	3618	4	2	41,650	3	0	45,596	1	6	4,945	6	6
February	6356	5	6	51,442	6	2	67,195	3	2	14,752	5	0
March	4647	6	6	38,344	5	5	51,463	6	0	13,099	0	3
April	4026	0	2	33,812	7	0	50,407	2	6	16,194	3	6
May	4194	5	4	36,286	1	2	54,937	6	3	18,651	5	0
June	4190	7	7	36,308	1	0	51,877	0	6	15,568	7	6
July	2749	2	4	22,687	5	1	40,673	1	1	18,087	4	0
August	5389	1	2	44,490	3	1	61,681	0	3	19,270	5	2
September	4496	6	2	37,094	3	6	55,994	3	6	18,896	0	0
October	5889	3	6	48,588	0	7	67,623	1	6	19,035	0	7
November	4629	6	4	38,195	7	5	54,248	2	7	16,052	3	2
December				[Not received.]								

ENGLISH MINES.

HOLMBUSH MINING COMPANY.

March 29.—I beg leave to inform you that Hitchins's shaft is sunk to a depth of 51 fms. 1 ft.—ground not so favourable for sinking. In the 110 fathom level west the lode is six inches wide, of mundic and spar, intermixed with copper ore. The lode in the 100 fathom level west is still very productive, being 1 ft. 6 in. wide, and worth 35*l.* per fathom. In the ninety fathom level west the lode is 1 ft. 3 in. wide, and worth 12*l.* per fathom. The rise in the back of the eighty fathom level, against Hitchins's shaft, is still in favourable ground. In this level, east of the engine-shaft, the lode is 1 ft. 8 in. wide, composed chiefly of mundic and spar. The lode in the eastern stopes, in the back of the eighty fathom level, is 1 ft. 4 in. wide, and worth 20*l.* per fathom. The lode in the western stopes, in back of ditto, is two feet wide, and worth 35*l.* per fathom. In the seventy fathom level, eastern stopes, the lode is twenty inches wide, and worth 30*l.* per fathom. The lode in the western stopes, in back of ditto, is eighteen inches wide, and worth 25*l.* per fathom. The cross-cut to Hitchins's shaft, at the sixty fathom level, and rise in back of ditto, against Bray's shaft, are still progressing favourably. The tribute pitches are still yielding good supplies of ore. In consequence of the samplers not attending on Friday, as appointed, the sampling is now deferred until to-morrow. F. PHILLIPS.

WHEAL LEEDS MINING COMPANY.

March 27.—Eighty Fathom Level East—Lode eighteen inches wide, composed of ore and spar. Sixty Fathom Level East—Lode eighteen inches wide, producing two tons of ore per fathom. Fifty Fathom Level East—Lode eight inches wide, producing one ton of ore per fathom. We have suspended the western levels for the present. We have set a cross-cut south, at the forty fathom level, and a winze to communicate from the seventy to the sixty fathom level. C. H. RICHARDS.

TRETOIL MINING COMPANY.

March 29.—The lode in the forty fathom level, west of engine-shaft, is about three feet wide, good tribute ground. The lode in the forty fathom level, east of engine-shaft, is one foot wide, tribute ground. The lode in the thirty fathom level, east of Williams's shaft, is one foot wide, tribute ground. The lode in the twenty fathom level, east of Williams's shaft, is small and unproductive at present. The part of the Mine Park lode we are driving on at the adit level, west of Johns's shaft, is one foot wide, producing spar, and a small quantity of ore. Tregellas's lode, at the same level, is one foot wide, unproductive. H. WILLIAMS. JOHN MORCOM.

TRELEIGH CONSOLS MINING COMPANY.

March 27.—We have finished cutting the plat at the seventy fathom level, at Christoe, and shall commence driving east and west on the lode immediately. In the sixty east the lode is large, producing a little ore. The sixty west is not yet clear of the disordered ground. In the fifty west the lode is four feet wide, of a favourable appearance, worth 7*l.* per fathom. In Good Fortune shaft we have a very promising lode in sinking; it is about eighteen inches wide, composed of spar, mundic, and ore. In the thirty four west the lode is two feet wide, with a good leader of ore in the end, worth 4*l.* per fathom. The twenty fathom level is improved; the lode is two and a half feet wide, worth 8*l.* per fathom. W. SINCOCK.

WEST WHEAL JEWEL MINING ASSOCIATION.

March 29.—The ground in Buckingham's engine-shaft is still troublesome for sinking. In the fifty-seven cross-cut south the ground is rather harder than last reported. The thirty west, on Tolcarne lode, is worth 8*l.* per fathom. The thirty west, on the south lode, is worth 4*l.* per fathom. The twenty west, on the south lode, has not been taken down during the week; the winze in the bottom of this level is worth 8*l.* per fathom. The deep adit west, on Wheal Jewel lode, is worth 7*l.* per fathom, and the rise in the back of the level continues worth 25*l.* per fathom. S. LEAN.

ROSE-DOWN MINING COMPANY.

March 23.—We have not yet driven through the large lode cut in the deep adit some time ago; we are still passing through a large mass of chlorite, with abundance of mundic, and with a small portion of copper ore mixed in spar, &c.; it continues exceedingly hard, and, of course, our progress is very slow, which is quite unexpected; we have already driven on this lode twenty-one feet. As to the primary objects (the great copper lodes) we are decidedly of opinion they are laying before us. During the last two months six men have only progressed in the adit on account of the intersection of this unexpected lode, about seventeen feet; of course we advise by every means to persevere in extending the adit south. We sold yesterday about 116*l.* worth of tin, the particulars and amount will be duly forwarded you. The appearance of the tin lode is such as we consider will pretty much more than pay its way for working—a statement also of which relative to the last return will be forwarded to you. R. ROWE.

UNITED HILLS MINING COMPANY.

March 31.—Adit End East—Lode about 2 ft. 6 in. wide, producing a little ore, with a promising appearance. Adit End West—Lode eighteen inches wide, poor. Ten Fathom Level—Lode three feet wide, producing a small quantity of ore. Twenty Fathom Level—Lode two feet wide, with but little ore. Thirty Fathom Level—Lode three feet wide, two feet of which orey. Thirty-six Fathom Level—Lode three feet wide, producing some ore, but coarse in quality. Forty Fathom Level—Lode three and a half feet wide, orey throughout, but of coarse quality. Fifty Fathom Level—In the eastern end of this level the lode is three feet wide, with some stones of ore; western end three and a half feet wide, ore throughout. Sixty Fathom Level—In the eastern and western ends of this level the lode is four feet wide, one foot on the north part good ore. C. PENROSE.

REDMOOR CONSOLIDATED MINING COMPANY.

March 24.—The engine-shaft is sunk 10 ft. 9 in. below the fifty fathom level; the ground there is very easy for sinking—we have given 9*l.* 10*s.* per fathom; we consider, however, it will require the sumpmen (also in number) from a week to ten days to make such alterations in the pit-work as we require, to sink for the intended sixty fathom level. We have also set the fifty fathom level cross-cut to drive south by six men as a new bargain; it is taken at 3*l.* per fathom; the ground is very favourable. At the forty fathom level we have cut the south lode, it is about 1 ft. 6 in. wide, composed of copper ore, mixed in mundic, spar, and capel, but not rich for the former; the ore is of good quality, and has a promising appearance, we consider rather better than where it was cut at the thirty fathom level over, but as very trifling has yet been done, merely passing through it in the cross cut, that it is quite premature to attempt to form a correct opinion how the lode at this level will turn out. At the thirty fathom level we are driving west on a lode, which we have termed the middle copper lode; we have driven about six feet on its course, and find it to be eighteen inches wide, with an abundance of mundic; we consider this lode is deserving, and ought to be prosecuted. At this level we are also driving south on the silver-lead lode, the price we give for driving is 35*s.* per fathom; the lode is in a short fluorous nature, about six inches wide, and the back of this level will set at about one half set of 11. During the past month we have raised a winze through from this level (thirty), to the twenty fathom level, in doing which it has proved of great advantage in ventilating the said levels, as well as discovered some tribute ground on the copper lodes, which we have been able to set a new pitch at 7*s.* 6*d.* out of 11. At Hurl Down adit, going north, we have driven nearly six fathoms—ground is moderate; price given to-day is 40*s.* per fathom. We have about eight tons of silver-lead ore broken, and the computed quantity of copper is twelve tons. R. ROWE.

TAMAR SILVER-LEAD MINING COMPANY.

March 26.—Twelve pitches have been set, and nine others, their taking not expiring—making the number of pitches working altogether 21, varying from 4*s.* to 14*s.* out of 1*l.*, on the value of the lead only, as usual. During the past month we have been thrown back in raising the regular quantity of ore, on account of not being able to work two of our principal pitches in the back of the 105 fathom level, the air becoming so impure obliged us to suspend the working of the said pitches for a fortnight, and, in the interim, was under the necessity of employing the two parties of tributers to communicate a winze from the 95 to the 105 fathom level, for ventilating that part of the mine, consequently our next sampling will not be quite so much as we are accustomed to sample. This work, however, I am glad to say, is now completed, and the tributers alladed to are gone to work regular, and have fair prospects of breaking a pretty large quantity of work. The several other pitches remain stationary as to prospects since my last inspection of the 28th ult. At the 135 fathom level going south of the engine-shaft the lode is 1ft. 6in. wide, mixed with ore, spar, and capel. At the 125 fathom level the lode is one foot big, yielding a little ore. At the 115 fathom level the lode is six inches wide, and rich for ore. In the 105 fathom level the lode is heaved to the east of its regular course, on account of a flucan intervening, and we expect to drive about 12 ft. westward to cut the main lode. In the 95 the lode is three feet wide, very hard, producing good saving work. We have suspended for the present the eighty-five and seventy-five fathom levels, and have employed the same men to sink a winze from the latter to the former level, for the purpose of dividing the ground for tribute, and as well improving the air in that part of the mine. We expect in a week to hole the winze rising from the forty-five to the thirty-five fathom level, and, when effected, will enable us to carry on our tribute there with greater facility. The last computed four-four tons of ore was sold on the 15th inst. to Messrs. R. and W. Michell, at 16*l.* 11*s.* per ton; and the computed fourteen and a-half tons to B. Somers, Esq., at 15*l.* 11*s.* per ton. R. ROWE.

PRODUCE OF THE PRUSSIAN MINES DURING THE YEAR 1837.

[From the *Bulletin de la Société d'Encouragement.*]

Coal ..... quintals.*	41,573,961	Sulphur ..... quintals.*	436
Bovey coal (lignite)	10,450,329	Silver	5,824
Oxide of manganese	5,612	Lead	23,957
Galena (sulphuret of lead)	42,749	Oxide of lead	10,847
Cast-iron	1,945,982	Copper	19,347
Bar-iron	1,141,536	Wrought copper	16,148
Sheet-iron	153,573	Brass	18,444
Steel	103,938	Zinc	214,486
Refined steel	47,463	Rolled zinc	12,808
Cobalt	8,791	Alum	48,877
Arsenious acid	3,176	Sulphate of iron	33,857
Sulphuret of antimony	526	Sulphate of alumina	3,467
Regulus of antimony	373	Common salt	44,109

[The above account is valuable, as giving an idea of the mineral produce of Prussia, though we have reason to believe that the statement, in some respects, is not exactly to be depended upon, being under the actual quantity yielded by the mines.—ED. M. J.]

* The quintal may be assumed at about 123 lbs. English.

GREAT COAL-FIELD, NEW BRUNSWICK.

The Great Coal-field is situated between the primary rocks of the county of Charlotte and King's County, and the Straits of Northumberland, on the Gulf of St. Lawrence. Only the south and south-east sides have yet been explored; the west, north, and north-east sides still remain to be examined, and its limits, therefore, in the latter directions, yet remain unknown. The division of this coal field, situated southward of the St. John, is the segment of a large circle, described between the Keswick above Fredericton, and the Oenabog below Gagetown, and touching at Skin Creek and the head of the Oromocto. Its south-eastern side extends along the trap and syenite rocks of Springfield, and the dividing line between King's and Queen's, Westmoreland and Kent counties, to the Straits of Northumberland. From one of the branches of the Oromocto to the Saint John, and from thence eight miles eastward of the entrance of the Washademoak, the old red sandstone and carbouiferous limestone appear, cropping out from beneath the millstone grit, along a distance of upwards of thirty miles. These formations have been already described. From what I have been able to discover, I believe that this coal-field extends in a northerly direction to Bathurst, a distance of 150 miles, and to Miramichi, 120 miles, and from the latter place along the coast to Shediac, which may be estimated at seventy miles. Until the north-east side of this vast coal tract is explored, it would be impossible to give a correct account of its area; but it may for the present be considered equal to 5000 square miles ! ! ! We are aware that in making this statement, we must necessarily be exposed to remark; but it is nevertheless supported by the most unquestionable facts; and we have only to appeal to them, in vindication of what is here recorded. This tract may, perhaps, bear the reputation of being the largest coal-field ever discovered on the globe. Over the whole of this vast area, the conglomerates, sandstones, shales, ironstone, and frequently coal, appear at the surface, filled with innumerable remains of plants, that have long since ceased to exist; but whose relics, as they are seen in almost every rock, bear ample testimony of the herbage of former periods. This vast expanded tract, in every part, abounds in tropical plants, many of which have evidently been changed into enduring beds of coal, while others have been converted into different kinds of mineral matter, and form the most faithful record of the changes this earth has undergone since it first came from the hands of its Supreme Architect. To distinguish this extensive tract from the Westmoreland district and other coal-fields in the British provinces, we have designated it by the name of the "Great New Brunswick Coal-field," which, for its magnitude and wealth, will be better known long after its first geological pioneer has ceased to travel over its surface.—*Gesner's Geological Survey of New Brunswick.*

MINING NOTICES.

[Under this head we purpose collecting such paragraphs as may appear in the provincial and other Journals, having reference to discoveries and improvements in mining operations at home and abroad. It is hardly necessary to observe, that we must not be considered to admit the correctness of the information conveyed, which, in too many instances, requires cautious investigation—the sanguine expectations of parties in some instances, and the want of honesty in others, throwing a degree of responsibility on a Journal in giving publicity to reports, which we do not intend taking upon ourselves.]

COAL MINE, QUEEN'S COUNTY.—The coal mine on the lands of Deerpark, near Mountrath, which was in progress of being opened last summer, but relinquished through the winter, has been recommenced on Monday, the 15th inst. The proprietor of the soil (Sir C. H. Coote, Bart.) has procured several skilful working miners, and the necessary implements for working, and it is generally expected that ere long he will be repaid by a most abundant bed of coal.—*Leinster Reformer.*

DIAMOND MINE IN SUMATRA.—The last letters from Sumatra state, that a mine had been discovered in the district of Dolandolo, which appears to be as rich as those of Borneo. The gold mines of Boojol and Kampong Kardi, which have been worked since 1837, appear to be more productive in proportion to the depth from the surface.—*Athenæum.*

IRON IN NORTH AMERICA.—We learn that a considerable change is our extensive dealings with the United States, in the article of iron, is likely to take place, and the enormous exports of pig-iron to that continent will be greatly diminished, in consequence of late discoveries of immense quantities of iron of a very superior quality in Maryland. What renders this discovery of so great value is, that both water and railway carriage are at hand, and an inexhaustible supply of coal and wood. Mr. J. E. Puddick, the agent for the estates, has dispatched an experienced mining engineer and a surveyor to report on this property, which we hear is to be worked on a large scale by English capital.—*Railway Magazine.*

IMPORTANT DISCOVERY.—Mr. Neville, of the Customs, has discovered a metal, supposed to be platina, in the fissure of a rock about eighteen miles distance from Melbourne. It is heavier than iron, being eleven times more weighty than water. Several chemists have been attempting to analyse it, but without effect. Mr. Neville says that he could load several ships with it, in such quantities has he seen it. It is somewhat singular that Mr. Neville discovered the same metal, but not of so pure a quality, on the Sydney side of the country, some months ago, and as the chemists could not analyse it there, he sent it home to England, but has not yet heard of the result of his speculation.—*Port Philip Herald.*

DISCOVERY OF COAL IN FRANCE.—An important discovery of a mine of pit coal, which presents a seam of five metres thick, has just been made in the neighbourhood of Quimper, a short distance from the port of Brest.—*Moniteur Industriel.*

COAL MINES.—Coal has been obtained near Petricroft, in Lancashire, on the land of T. J. Traffort, Esq., at the depth of 1350 feet from the surface. "We have not heard of a shaft before (observes the *Manchester Times*) equal in depth to this." We inform our contemporary, that Messrs. Pemberton, in 1836, reached a seam of coal in Monkwearmouth at the depth of 1170 feet below the surface; and have since sunk to a still greater depth, their mine being out, we believe, the deepest in the world below the level of the sea, but the deepest below the surface of the earth.—*Gateshead Observer.*

MINE ACCIDENTS.

St. Hilda's Pit, South Shields.—On Wednesday week, Luke Laidler fell down St. Hilda's pit shaft, and was instantly killed.

Team Colliery, near Ravensworth.—A fatal accident occurred at this colliery by the falling of a large stone from the roof of the mine, it struck two lads, killing one, and breaking the leg of the other, besides inflicting other serious injuries.

Consols Mine.—On Friday week, John Gill met with his death by falling from the 105 to the 120 fathom level, in Consols Mine.

Upper Bank Works, Swansea.—Two copper-men were severely scalded at these works last week; they were engaged in tapping the furnace, when an explosion took place.

Tupton Colliery.—As G. Goodall was going to his employ at this colliery, he fell into a deep pit, and was killed on the spot.

ANTHRACITE COAL TRADE OF THE UNITED STATES.

The following table exhibits the quantity of anthracite coal sent to market from the different regions from the commencement of the trade in 1820 to 1841, together with the annual increase and consumption:—

Years.	Schuylkill.	Mauch Chunk.	Beaver Mead.	Hazleton.	Sugar Loaf.	Pine Grove	Shamokin.	Lackawanna.
1820	....	365	—	—	—	—	—	—
1821	....	1,073	—	—	—	—	—	—
1822	....	2,240	—	—	—	—	—	—
1823	....	5,823	—	—	—	—	—	—
1824	....	9,541	—	—	—	—	—	—
1825	5,396	26,008	—	—	—	—	—	—
1826	16,856	31,360	—	—	—	—	—	—
1827	29,493	32,074	—	—	—	—	—	—
1828	47,181	30,332	—	—	—	—	—	—
1829	78,293	28,116	....	....	....	....	....	7,089
1830	89,994	41,710	....	....	....	....	....	45,000
1831	81,854	48,366	....	....	....	....	....	54,000
1832	209,271	75,000	....	....	....	....	....	84,000
1833	250,500	123,000	....	....	....	....	....	111,777
1834	226,092	106,244	....	....	....	....	....	43,700
1835	335,685	131,250	....	....	....	....	....	90,000
1836	445,754	146,502	....	....	....	....	....	100,000
1837	353,260	102,193	59,617	....	....	18,000	....	115,387
1838	434,691	152,039	44,908	16,211	....	13,000	....	76,231
1839	442,036	140,631	38,479	34,000	7,350	20,000	11,330	122,000
1840	432,191	102,164	43,619	30,910	29,000	13,000	15,500	148,470
	3,279,769	1,473,473	169,631	100,387	36,350	75,490	27,435	1,092,125

Years.	Aggregate.	Annual increase.	Consump.
1820	365	—	—
1821	1,073	708	—
1822	3,240	1,167	—
1823	5,823	3,583	—
1824	9,541	3,718	—
1825	33,509	23,852	—
1826	48,115	14,644	—
1827	61,567	13,452	—
1828	77,413	15,750	—
1829	110,409	27,996	—
1830	174,754	83,917	—
1831	176,039	2,085	—
1832	568,871	192,051	177,000
1833	865,365	1 6,491	818,000
1834	676,636	decrease	475,000
1835	957,935	281,199	856,000
1836	696,502	139,691	850,000
1837	874,880	178,018	695,000
1838	718,816	decrease	700,000
1839	817,660	61,7 7	807,000
1840	965,4 4	47,773	—
	6,467,172		

The above table includes the shipments from all the anthracite regions in the State, except the Wilkesbarre Basin, from which we have no returns. This supply, however, does not affect the Atlantic market—as the whole quantity, which, in 1837, was 17,492 tons, is consumed in the interior. The new impetus given to the coal trade by the erection of anthracite iron works on the Susquehanna, will greatly increase the supplies from the Wilkesbarre region hereafter.

IMPROVEMENTS IN STEAM-BOILER FURNACES.

The following notice of some improvements lately adopted in the construction of the furnaces of steam-engine boilers, by M. Deniset, son., an engineer and machinist, is given in the French publication *L'Ami des Arts*. A more particular description of the nature of the improvement, by which the effects stated are produced, is promised in a succeeding Number:—"Until the present time, almost all the furnaces of steam-engines have been constructed on the same plan; the same false and injurious principle is universally adopted; they are constructed on one system, and, it might be said, they are all the work of one builder, so little difference is perceptible between them. Among the number of defects remarkable in the present furnaces, resulting from their defective construction, we will particularise the following. The furnaces communicate too much heat to a certain portion of the heating surface of the boilers, and communicate scarcely any heat to the rest of the surface, though the heat ought to be equally distributed—hence the frequent repairs requisite in the parts of the boilers that have been too much heated, and the increased danger of explosions. The calorific effect of a portion of the combustible gas is destroyed by its not being entirely consumed; there escapes up the chimney also a considerable quantity of coal, in a state of almost impalpable powder, carried away by the draft without being burnt—hence arises that dense black smoke which announces from a distance the presence of a steam-engine, and which is, also, too often the cause of complaint and annoyance to those in the vicinity. They consume too much coal, and do not make the most of that which is used. On the present plan of constructing furnaces it is not possible instantaneously to intercept the communication of the flame with the boiler, which on many occasions would be very advantageous.

"We can instance, in support of our assertion, the steam generators of the chief manufactory in the department of Haut-Marne. They have scarcely worked from 500 to 600 days of twelve hours each, and have had part of their surfaces renewed nine times. The furnaces which heat these generators must consequently be very bad, when their operations are attended with such results. These engines also consume five kilogrammes of coal an hour for every horse power, which is double the quantity that a good engine ought to consume. We will notice, in passing, another steam-engine at the same establishment, placed at the mouth of a blast furnace, and heated by the flame that escapes. In this case, notwithstanding the quantity of heat which may escape from the gases at the furnace mouth when burning, these gases have never been made to communicate heat to the boiler. They become, in short, entirely extinguished when brought into contact with the pipes of the boilers, and are not relighted till they reach the chimney, the walls of which they make red hot.

"So little has the management of this kind of furnace been understood, that the engine has been taken to pieces, and altogether stopped, rather than attempt those necessary improvements which common sense suggests should have been made.

"The arrangements which we have made for generators, heated either by flame direct from the fuel, or by the flame of gases escaping from blast-furnaces, have enabled us to attain the following results:—The whole heating surface of the boiler is raised to the same temperature, whatever the length of the boilers may be. The generators last a considerably longer time, in consequence of not being burnt in places as they formerly were. Being no longer exposed to the flame of a furnace of a high degree of temperature, they are not in danger of becoming red hot, and the chances of explosion, if not impossible, are extremely rare. All the combustible gases are completely relighted and burnt; they not become extinguished till their heat is exhausted, and they are converted into incombustible gas. Coal dust is also entirely consumed by the burning gas, and no dense smoke is seen issuing from the chimneys, which it is no longer necessary to build to so great a height.

"All the gas and coal being turned to account, the saving in the consumption of fuel is considerable. The heat underneath the generators may be diminished without extinguishing the fire, which is of advantage in cases when, owing to a mistake, the water in the boiler is too low. It is then possible to let it cool, and avoid the explosion which usually happens from this cause.

"The plan on which our furnaces are constructed is remarkable for its simplicity, any experienced builder being able to execute them."

IMPROVED DIAL OR COMPASS NEEDLE FOR MINES.

At the quarterly meeting of the Manchester Geological Society, held at their rooms, on Thursday week, Mr. Bateman announced that he had received from an old mineral lover and working miner (named James Ramsden, living in King-street, Oldham), a letter on the subject of the compass needle, stating that, having been a long time engaged in making mineral surveys, he had experienced the difficulties arising from numerous intervening metallic bodies, which tended to overpower or lead the needle from its natural direction, so that it could not always be depended upon, and, consequently, subterranean surveys would not always coincide. The rails, and particularly those of locates or rolled iron, attracted and repelled the needle; water, holding a quantity of iron in solution, and various metallic bodies, interfered with it. To obviate these evils, the writer had invented a compass needle (one of which accompanied the letter), as a donation to the society, which he described as consisting of three parts—viz., two needles or bars of steel, each 1½ inch long, and each of course having a north and a south pole, divided in the middle by a brass bar, which separates the north pole of one needle from the south pole of the other by about ½ inch; and the writer states, that the affinity of one of these for the other is so strong, that the polarity of the needle, as a whole, is maintained—that neither water, ironstone, nor soapstone would act upon it—that the rails could not affect it, nor even the friction of the iron wheels of waggons on the rail's, though this would draw the common needle five points from its "polarity." The external north or south pole of his needle could not be led away five or eight directions, because of the union and mutual attraction of the two internal poles. Were this property of his needle considered, he thought it would introduce itself into general use.

MEETINGS OF SCIENTIFIC BODIES.

IN THE ENSUING WEEK.

SOCIETY.	PLACE OF MEETING.	DAY.	HOUR.
Royal Asiatic	14, Grafton-street	Saturday	3 P.M.
Westminster Medical	Exeter Hall	Saturday	8 P.M.
Royal Geographical	21, Regent-street	Monday	9 P.M.
Linnean	Soho-square	Tuesday	8 P.M.
Horticultural	21, Regent-street	Tuesday	2 P.M.
Civil Engineers	25, Great George street	Tuesday	8 P.M.
Architectural	33, Lincoln's Inn fields	Tuesday	8 P.M.
Society of Arts	Adelphi	Wednesday	7½ P.M.
Geological	6, Mercers' House	Wednesday	8½ P.M.
Bl. Society of Literature	St. Martin's place	Thursday	4 P.M.

PUBLIC COMPANIES.

MEETINGS.

Bahia Steam Navigation Company	George & Vulture Tavern	April	5	11 12
Ashby-de-la-Zouch Canal Company	Ashby-de-la-Zouch		5	11
Argus Life Assurance Company	Throgmorton street		6	2
Dinorwic Iron and Coal Company	London Tavern		6	1 2
River Dee Company	Mansion house street		7	11
Britannia Life Assurance Company	Princes street, Bank		8	12 1
Imperial Gas Light and Coke Co.	53, John street, Bedford row		6	1
Chester and Birkenhead Railway	Clarendon Rooms, Liverpool		10	12
Maryport and Carlisle Railway	Station, Maryport		10	11
Banks Tin Mining Company	George and Vulture Tavern		14	1
Newcastle-on-Tyne & Carlisle Railway	66, Close, Newcastle		27	12

CALLS.

East Trethill Mining Company	£5	April 16	Barclay, Bevan, and Co.
Wheal Leeds Mining Company	£5	16	Barnett, Hoares, and Co.
Polberro Mining Company	£5	14	Bosanquet and Co.
South Australian Company	£5	15	Ladbrokes and Co.
London and South Western Railway (Gosport Branch)	£5	15	Williams and Co.
Boreham, &c. Docks	£5	15	Williams and Co.
Redmoor Mining Company	£10	21	Bosanquet and Co.
Great North of England Railway	£25	21	J. Pease, Darlington.
Agricultural and Commercial Bank of Ireland	£65	21	Office.
Hartlepool Dock and Railway	£25	21	Barnett and Co.
Wheal Wallis Mine	£5	May 10	Manchester & L'pool Dist. Bk
Hungerford and Lambeth Suspension Foot Bridge Co.	£5 10s.	15	London and County Bank.
Rio de Amo El Gold stream Works	£30	22	Sloane, Martin, and Co.
Cambrian Iron and Spelter Co.	£25	June 1	London Joint-Stock Bank.

DIVIDENDS.

Cobre Copper Mines	£2 per share.	St. Austinfriars	April 6.
United Hills Mine Company	10s. per share	Office, Adam's court	15.
Commercial Bk. of New Orleans	4 per cent.	Bond, Irving, and Co.	16.

JOINT STOCK BANKS.

Birmingham Banking Company—3 per cent. for half year, and a bonus of 4s. per share.	London & Westminster Bk.—6 per cent.
Boston District Bank—6½ per cent.	Metropolitan Bank—4 per cent.
Bank of Manchester—6 per cent.	Northamptonshire Union Bank—7s. per share as the half year.
Bradford Commercial Bank—6 per cent.	Northumberland and Durham District Bank—5 per cent.
Barnsley Bank—5 per cent.	National Provincial Bank of England—6 per cent.
Bank of Wiltshire—6½ per cent.	National Bank of Ireland—6 per cent.
Carlisle City and District Bank—7 per cent., and bonus of 1 per cent.	Newcastle-upon-Tyne Bank—6 per cent.
Carlisle & Cumberland Bank—7½ per ct.	Stourbridge and Kidderminster Bank—10s. per share for half year.
Chesterfield and North Derbyshire Bank—7½ per cent.	Shropshire Bank—5 per cent. for half yr.
Cornish Bank—4½ per share.	Sheffield Bank—3½ per cent.
Coventry and Warwickshire Banking Company—5 per cent.	Sheffield and Rotherham Bank—10 per ct.
Devon and Cornwall Bank—6 per cent.	Sunderland Bank—10 per cent.
Dudley & W. Bromwich Bank—12½ cent.	Warwickshire and Staffordshire Bank—10 per cent. for half year.
Derby & Derbyshire Bank—7½ per cent.	West Riding Union Bank—10 per cent.
Halifax Joint Stock Bank—6 per cent.	Wilts and Dorset Bank—6 per cent.
Leeds Bank—6 per cent.	Wakefield and Barnsley Bank—6 per ct.
Leeds and West Riding Bank—6 per cent. for half year.	York Union Bank—11 per cent.
London and County Bank—6 per cent. up to the 31st of December.	York City and County Bank—6½ per ct.
Leicestershire Bank—12 per cent.	Yorkshire Agricultural and Commercial Bank—6 per cent.
	Yorkshire District Bank—4 per cent.

RAILWAYS.

Birmingham and Derby—15s. per share.	London and Greenwich—7s. per share.
Bristol and Gloucester (Cheltenham Branch)—4 per cent.	Liverpool and Manchester—4 per cent. for half year.
Clarence Junction—6½ per cent. for half yr.	North Union—4½ per share.
Hull and Selby—10s. per share.	Newcastle and North Shields—6 per cent.
London and Birmingham—4 per cent. for half year.	Preston and Lancaster—6½ per cent. for half year.
London and South Western—10s. per sh. for half year.	Sheffield and Rotherham—6 per cent.
	York and North Midland—10s. per share.

GOLD AND SILVER.

Foreign Gold in Bars (Standard)	per oz.	£3 17	9
Foreign Gold in Coin, Spanish Doubloons		0 0	0
20 Francs pieces		0 0	0
New Dollars		0 4	10½
Silver in Bars (Standard)		0 5	0

NOTICES TO CORRESPONDENTS.

The importance attached to the properties of the sulphur ores of this country, and their application to purposes which, until of late, were unknown, renders a paper, inserted in another column (with which we have been favoured by a correspondent), of peculiar interest at the present moment, it affording a comprehensive view of the nature and properties of sulphur, and, among other subjects treated upon, one which will excite particular attention—viz., the extraction of sulphur from pyrites, with remarks on the useful employment of the residue of distillation. We shall be most happy to receive further communications on this subject from our correspondents.

GEOLOGY OF THE PARIS BASIN.—We have in type an interesting Geological Description of the Paris Basin, but are compelled to postpone its insertion.

BRITISH IRON COMPANY.—We have too many claims on our columns to admit of devoting so much space as our Liverpool correspondent requires, to "place the company's present position in the true light before the public, and how it might have been averted;" he must publish a pamphlet, if he wishes to give publicity to his views, unless he can express them in a paper of a moderate length.

The papers on the Resources and Properties of Coal, and the Geological Structure of the Wealden District, are unavoidably postponed.

INSTRUCTIONS FOR BLASTING.—The concluding part of this paper will be published next week.

We have been favoured by a correspondent ("A," Ecton) with a sketch and description of an Improved Machine for Trunking "Slime," which shall appear in our next.

DURHAM COUNTY COAL COMPANY.—The publication of "T. M.'s" letter had better be deferred until after the forthcoming meeting. Should the desired information not then be afforded, we shall publish it, together with several others, which we have withheld, in the hope that the directors will see the necessity of meeting the shareholders with candour, and render a just account of all their transactions.

It will afford us pleasure to forward the case for the opinion of "K. A. T. E."

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, APRIL 3, 1841.

It is with pleasure we refer to our columns of the present Number, as well as to those which have anticipated them since the commencement of the year, as evidence of the increasing interest excited by the matter which finds place of record in the MINING JOURNAL. We are not naturally egotistical, nor ought we to be so considered on the present occasion, as it is to our correspondents that we are indebted for being able to submit to our readers a weekly periodical possessing so many claims to the attention of the geologist, the miner, the collier, the assayer, the engineer, the scientific reader, and the adventurer, while the "postscript" affords to the fundholder and the commercial man a review of the week's proceedings in the money market, and the latest intelligence.

We are induced to direct attention to the subject-matter of the Journal, in the present instance, for the purpose of availing ourselves of acknowledging our obligations to several correspondents, whose papers have lately appeared in our columns, and which we have illustrated by diagrams, being anxious at all times to render the MINING JOURNAL useful and instructive, and, indeed, to carry out the objects which its very title indicates—a Journal of Mining Operations—leaving it to our readers to ledgerise the several articles by double or single entry, as they may think fit. In referring to the able articles on the working of collieries, and operations connected therewith, the papers of Mr. M. DUNN, of Newcastle, Mr. STANLEY, of Sunderland, and other correspondents, who have subscribed themselves under initials, or fictitious signatures, we have more particularly to acknowledge, from the interest which has been manifested on this subject. The communications of Mr. BYERS, Mr. M. J. ROBERTS, Mr. PRIDEAUX, and others, on the various modes of assaying—the letters of Mr. BUDGE and others, on dialling and underground surveying, with the numerous subjects of a scientific character treated upon in our columns, derived from correspondents, have materially enhanced the character of the Journal. The paper in our present Number, "On the Application and Properties of Sulphur," amongst other original papers which have from time to time appeared, will be read with interest, and at once assure our subscribers that we are not less anxious to render information, from the best sources, than they are to acquire it.

The general meeting of the Cambrian Iron and Spelter Company, held on Wednesday last, affords opportunity for making some few remarks on the course adopted in excluding the press—the object of which is too apparent to render observation necessary, except in cautioning shareholders in other companies from being made the dupes of a secret conclave. We have, on more than one occasion, animadverted on the system of secrecy observed, and have not hesitated to express our conviction, that there were good and sufficient reasons—at least, in the opinions of the directors—why the public should not be put in possession of the affairs or circumstances of the company, or the absent shareholder made acquainted with the nature of the discussion which might take place at the general meetings. The mere printing of a report and accounts is, in a great measure, a farce, even in the cases where such course is adopted, compared with the interrogatories and explanations afforded at a public meeting. This company, however, may lay claim to the right of exclusion of the press, perhaps, more than others we could name, for, if we are rightly informed, the scheme may be considered to have been, in a great measure, a failure—the public would not "bite," and hence the necessity of its being upheld, in hopes of better times, by a few individuals. Backed by the support of the coffers of the London Joint-Stock Bank, much has, doubtless, been done in the expenditure of money, but we should question whether the profits of the company, when in effective operation, will even pay the interest of the money they may have, or will find necessary, to borrow. We should think nearly 200,000*l.* has been already expended on the concern, which is highly creditable to Mr. BRUNTON, the engineer, for the erections and general laying out, without regard to the cost incurred. We will not, however, dwell on this particular company, but proceed to enumerate one or two other Iron Companies, the directors of which evince equal jealousy of publicity being given to their proceedings. We will first begin with the British Iron Company. This company, projected in the year 1824 or 1825, has, since that period, called up as subscribed capital no less a sum than 1,200,000*l.*, and by the quoted prices, the shares are worth (?) 80,000*l.* *less than nothing*—some 300,000*l.* or 400,000*l.* have to be paid Mr. ATTWOOD—legal proceedings are threatened by the directors against the shareholders in default, and, on the other hand, on application to the Court of Chancery by the latter against the board of directors—this is example the first of the "silent system." The next upon our list is the Rhymney Iron Company, the capital subscribed on the shares in which is 500,000*l.*, and which is represented in the market at 50 per cent. discount. Next, the far-famed Talacre Iron Company, of which we have already said enough for the present, although much remains behind. Here, then, we have enumerated four Iron Companies, which preserve silence, and do their deeds in darkness; the only exception in our share list being the Blaenavon Iron Company, to the meetings of which we have at all times had ready access, and whose shares maintain a fair price in the market, attributable alone to the candour and openness manifested by them, which engenders public confidence, and ensures public support. It will be seen that the companies we have enumerated stand thus:—British Iron Company, amount paid, 1,200,000*l.*—value 80,000*l.* *less* than nothing, or a premium given by the holders of the shares of 80,000*l.* over and beyond the money subscribed, with the view of avoiding further calls and responsibility. Rhymney Iron Company, amount paid, 500,000*l.*—value 250,000*l.*, and unsaleable to any extent. Cambrian Iron Company, amount paid something like 200,000*l.*, with no market value; and the Talacre Iron Company, the shares in which, even if paid up in full, no one would take as a gift. Such is the state of these companies, which refuse to give publicity to their proceedings, the cause of which may be well guessed at, while the effect is seriously felt by the proprietary—yet who have only themselves to blame. If among other companies we wished to adduce another instance, we might take the General Mining Association, brought out under most splendid auspices, and the shares of which obtained high premiums; this company, after having put forward reports, not only calculated to maintain the price in the market, but to lull the shareholders into a state of false security, by holding out promise to the ear, have called not only the amount of capital, being 400,000*l.*, or 20*l.* per share on 20,000 shares, but have lately, as appears by the letter of a correspondent, made a further call of 40,000*l.*—the market price of the whole concern being not much above the amount of the last call made.

We trust that we have said enough for a while to awaken the shareholders in these several companies from the stupor which has been productive of so much injury to their own interests, as well as to mining enterprise generally, from the evidence it exhibits of want of care and attention on the part of capitalists, and the consequent result of directors and jobbers making their fortunes, in many instances, at the public cost. The general meeting of the Rhymney Iron Company takes place next week; let some independent proprietor require, on the part of the shareholders, that a reporter of the press shall be present, and we promise him that the proceedings, with some comments, shall appear in our next Number; for ourselves we shall make our ordinary application, and expect, as usual, to be met with a refusal.

We are glad to find that Government is at last directing its attention to the "manufacture" of joint stock companies, and more especially those which come under the designation of *assurance* companies. The injury already sustained by the public from the want of a proper check over establishments of this nature, has been at last too strongly manifested to allow the system so generally pursued to be passed over with impunity. The late exposure of the fraud practised under the title of the West Middlesex Insurance Company, by which 200,000*l.* was abstracted from the industrious portion of the community—the Royal Union Annuity Company, in which Mr. GLENNY cut so conspicuous a figure, and of which the late Duke of YORK and several noblemen were represented to be patrons—the British and Australasian Bank in like manner—the known state of several life insurance and loan companies at the present moment, the investments of which have been either wastefully expended, or advanced without *bond fide* security (the directors trusting to the lives not falling in until they are *out*)—these have forced themselves on the attention of the Ministers, and it is with satisfaction we learn that they purpose referring the consideration of companies of this nature to a select committee. We need hardly say that the proposed measure has our earnest support. Let the committee be once appointed, and we will undertake to submit to their consideration some questions to be put to the managers and directors, which, if we mistake not, will reduce the number of our assurance companies very considerably, and strike off the list of directors many whose names are a disgrace to those with whom they are associated.

We perceive, by last night's Parliamentary reports, that Mr. LABOUCHERE moved for a select committee to inquire into the state of the law respecting joint-stock companies (banking companies excepted), with a view to the prevention of fraud, which was agreed to.

It is with regret we have this week to record the defalcation of a gentleman, whose name has so oft appeared in our columns as a director of several companies, and who held the responsible office of official assignee in the Court of Bankruptcy—Mr. PETER HARRIS ABBOTT. We felt it our duty, when that gentleman was in the zenith of his glory, living on the property and plunder acquired from others, to expose his conduct, trusting that it would serve as a caution to those who might become connected with him, for we were well assured, from the *exposé* in the matter of the Adelaide Gallery, and other circumstances which had come to our knowledge (of a nature to which we did not feel at liberty to give publicity), that the game must soon be up—and so, unfortunately, it has proved. The amount for which Mr. ABBOTT is in default has been reported at from 60,000*l.* to 80,000*l.*; and we are led to believe that it amounts to nearly, if not full, the former sum. We regretted to find that the *Times* lent itself to glossing over the misconduct of the party, which we can only attribute to the writer being, *possibly*, an official assignee himself; but the communication made by the LORD CHANCELLOR to the Commissioners of Bankrupts, of the determination to have monthly returns, will, we have no doubt, put all upon the *qui vive*, and have the effect of securing to the creditors the little which may be left to them from the bankrupt estate. We have heard of one or two bad cases, but as an inquiry is being instituted, we await the result. Mr. PETER HARRIS ABBOTT, and other *jobbers* like him, will find out that, in the end, "honesty is the best policy."

THE "PRESIDENT."—No tidings of the *President* had reached Liverpool up to ten o'clock yesterday (Friday) morning. The packet-ship Virginian, which would not leave New York earlier than the 14th ult., was then off the port; she may, perhaps, bring some intelligence of the steamer.

Mr. Murchison, the President of the Geological Society, has just left London upon a tour to the Ural Mountains and distant parts of the Russian Empire.

ON THE NATURE AND PROPERTIES OF SULPHUR.

The activity which at present prevails in the county Wicklow for increasing the supply of the sulphur ores of that district, attracts much attention, and the exposition of any information connected with the nature of the mineral, and the most advantageous manner of employing it in the industrial arts, must also be a subject of great interest to all those who can appreciate the national value of mineral wealth, as well as a great source of riches to those who successfully employ such information. In the first place, a short sketch of the statistics of sulphur, or brimstone, with an account of its nature and combinations, may be useful. It is most abundant in nature, being found in all formations, from the oldest to the newest; but it abounds chiefly in volcanic districts, where it is often found in a native state; it is largely combined with metals in their mineral state, in the form of sulphurets. Copper, iron, antimony, zinc, and lead, are almost always combined with it to a greater or less degree, and it is one of the most important operations in metallurgy to expel sulphur from the ores. Hitherto the sulphur consumed in Great Britain, amounting annually to about 30,000 tons, has been obtained from Sicily, where it is prepared in a manner hereafter described. It is found in mechanical mixture with earth, both at Solfatara, in Sicily and in Poland. Letters have lately been received from Tripoli, giving an account of an attempt made to work the sulphur mines in the Gulf of Syrte, which promise to be very productive. In Sweden, Saxony, and Bohemia, it is found in chemical combination with iron and copper. This mineral is known by the name of "mundic," also "pyrites," from the Greek word, signifying *fire*, on account of its peculiarity in emitting sparks when struck with any hard substance; it has been used as a substitute for gun flints. The mines of Cornwall, Anglesea, and Wicklow yield this mineral in great abundance, but sulphur has never been extracted from it in this country, except at the Pary's Mine, in Anglesea, where a small quantity is saved, but by a most extravagant process.

It will be interesting to mention a few of the peculiarities of sulphur, as the phenomena it presents, when heated, offer a striking contrast to the received theories of the tempering of steel and glass, and are analogous to those exhibited by Brony. At a temperature of 110 deg., sulphur is very fluid, and of a bright citron colour; it preserves these characters up to 140 deg.; but when once it passes this temperature, the phenomena it presents are most curious; for example, at 160 deg. it commences to thicken, and has a reddish tinge, and, if the heat is continued, it acquires a consistency, such that you may overturn the vessel which contains it without displacing the sulphur; between 220 and 250 deg. this change is most remarkable; towards the boiling point it again becomes liquid, but does not lose the colour given it by the heat, nor does it become so liquid as it was at 109 deg. When raised to a high temperature, and suddenly cooled, sulphur becomes soft; and if the experiment be well conducted on sulphur raised to a temperature of 230 deg., it will become so soft and ductile that it can be drawn into wires several feet in length.

ON THE USES TO WHICH SULPHUR IS EMPLOYED.

Soft sulphur can be employed with success in the arts, for taking delicate impressions and casts, such as of coins, medals, and seals, or of designs in relief; for in a few days it resumes its premature kindness, and these impressions serve as a matrix for forming other casts. Melted sulphur is also used for these purposes alternately with plaster, as the sulphur contracts in solidifying, while the plaster swells—thus the alterations in the one body are corrected by the other, preserving a proper image, which cannot be done when plaster alone is used. Sulphur is employed to cement iron and stone; it forms sulphurous acid, and by this means sulphuric acid—a commodity we shall treat more fully of hereafter; it is used in the manufacture of matches and gunpowder, combined with magnesia, lime, and potash; it is used as a medicine, and with mercury it forms cinnabar or vermillion.

ON THE REFINING OF SULPHUR FROM EARTHY MIXTURES.

When sulphur is found in combination with earthy matter, its purification generally consists of two distillations; the first roughly performed on the spot where it is obtained, with the object of rendering the cost of carriage less expensive; the second is made with more care, near the spot where it is brought to market. At Solfatara the first distillation is executed in a furnace, or gallery, in which are arranged ten or twelve earthen pots, about twenty inches apart, in two ranges—each of these pots containing about thirty pints. When filled with ore, broken to the size of road metal, the top is luted down, but there is a tube connected with an opening in one of the shoulders of the jar, about two inches in diameter and fourteen inches long, which communicates with a second jar, pierced with a hole at the bottom, from which the sulphur flows into a tub of water, and is then condensed—it is sublimed in the first jar and cooled down in the second. At Marsailles there is a large establishment for the refining of sulphur, conducted by M. Michel, who invented the apparatus; it consists of a cast-iron retort, and a vast chamber, which serves as a conductor. The retort, containing about 1500 or 1600 lbs. of material, and is heated by a furnace, which, however, has no communication with the chamber or the retort; an iron door in front serves to clear and recharge the retort, the beak of which conducts the fumes of the sulphur to the large chamber, where they are condensed and collected either in a liquid state or as the flowers of sulphur; the temperature of the condenser alone effecting the condition in which it is obtained. Much care is necessary to be observed in this process, as the admixture of a very small portion of air with the fumes in the chamber give rise to explosions, which are sometimes dangerous, for it often happens that the temperature of the chamber is carried to the height of 150 deg. (sufficiently high to inflame the sulphur); sulphuric acid is then rapidly formed, and in this process much heat is given out, and an explosion always follows; by valves placed at proper places this may be avoided, and the chamber should be freed of its oxygen by burning sulphur or charcoal in it before commencing to operate. Of late years the method which has been adopted, termed "decantation," has greatly removed the difficulty of the process, as explosions are now seldom known to occur. This arrangement consists in placing a large vessel, filled with crude sulphur, above the retort of distillation, and allowing the heat of the chimney to act upon it; a tube is made to wind round this vessel, furnished with valves, to permit the melted sulphur to flow through it and communicate with the bottom of the retort containing the sulphur to be distilled; this disposition has the advantage of maintaining a more uniform temperature, and rendering the operation more rapid. By the ordinary method the loss amounted to about 18 or 20 per cent, but by M. Michel's modification the loss is reduced to 11 or 12 per cent. Notwithstanding these precautions, the fumes of sulphuric acid which escape when opening the chamber to extract the sulphur or clear it out, frequently destroys all vegetation in the neighbourhood; it is, therefore, important to construct them so that the sulphur can be withdrawn without entering the chamber. Eight or nine charges are usually evaporated before running off the sulphur. It is of great importance to have thermometers inserted in the chamber, at such places as they can be observed, as we have seen that, if the sulphur is above the temperature of 110 deg., and suddenly cooled, it loses its citron colour, and is not so valuable in the market, although equally pure.

ON THE EXTRACTION OF SULPHUR FROM PYRITES.

Sulphur is also extracted from some metallic sulphurets, and is an important operation in metallurgy; it is more profitably obtained from the persulphuret of iron than from copper ores, and that for process may the more easily be comprehended, it may be said that iron pyrites is combined in such a manner, that if one-half of the sulphur be extracted, the residue will then be constituted in such proportions, that if the sulphur be acidified, and the iron be transformed into the protoxide, there will result the neutral salt of the sulphate of the protoxide of iron; this may be effected by the action of heat; but in Saxony and Bohemia, where sulphur is extracted from pyrites, not more than 25 per cent. of the sulphur contained is obtained, as it is stated that the heat necessary to disengage the remaining sulphur causes the residue to run into a cinder, and that it is impossible to withdraw it without destroying the apparatus. Under slightly different circumstances, however, I have seen the residuum of some sulphur ore from Wicklow, from which 75 per cent. of the sulphur had been extracted at chemical works in Glasgow, which was not so much run as to have rendered it impossible to withdraw it from the apparatus used in the above-mentioned places, and which may be described as follows:—Earthen tubes, open at both ends, and slightly conical, are placed across a furnace or gallery, having each a slight inclination of about an inch; in their lower opening is placed a star of earth, which permits the vapours to escape, but retains the ore, which is broken to small pieces, and put into the tube; a lid is luted to the upper end, and another tube is attached to the lower extremity, which serves to conduct the sulphur vapours to a condenser containing water; it is then remelted and run into moulds, such as we receive it. Each furnace is provided with from twelve to twenty-four tubes, each containing about one-quarter of a cwt., and the distillation lasts about eight hours; in a furnace of twenty-four tubes about 2000 lbs. of sulphur ore are treated in a week, and about 190 lbs. of sulphur ore obtained, which is about 14 per cent. M. Dartiques, at his establishment in the neighbourhood of Ramur, has made a slight modification of this apparatus, and obtains the same result. Sulphur is also extracted from pyrites at Falhun in Sweden, and Goslar in the Hartz Mountains; at the former place it is obtained by a process proposed by the celebrated Ghan, and may thus be described:—On the slope of a hillock a pile of pyrites is laid upon billets of wood; the wood is first ignited—the pile is then covered with baked earth or puddle (a small opening only being left at the top to regulate the combustion, and which can be closed by a flagstone)—the vapours are allowed to pass along a conduit, about forty-three feet in length, and formed of boards; the vapours which condense in this passage are taken out of small reservoirs in the form of sulphur, and the uncondensed vapours pass into a large chamber, where they circulate till condensed, which can be assisted by artificial means. This chamber, as well as the conduit, should be perfectly air-tight, otherwise the fumes of sulphur will be converted into sulphurous acid, and, should moisture be present, into sulphuric acid, by deriving oxygen from the atmosphere; the sulphur in general obtained by this process does contain so much sulphuric acid, that it is necessary to wash it. By the Goslar process not more than 1 or 2 per cent. of sulphur is obtained, but this process is instituted chiefly for the roasting of ore and not for obtaining sulphur; it is also practised at the Pary's Mine, in Anglesea, and may be described as follows:—In the centre of a truncated pyramid a chimney is formed of billets of wood, and, for the purpose of assisting combustion, passages are formed under the pile communicating with this chimney; the mass is then fired by throwing some ignited charcoal down the funnel, when combustion quickly takes place; the pyrites, in decomposing, emits a sufficient heat to evaporate the sulphur, which, at certain stages, is ladled out of small holes made in the top of the pile—the operation lasts for about three months. The sulphur thus obtained in Anglesea contains about 7 per cent. of impurities, while that imported from Solfatara contains only 3 per cent., and that not at all arsenical.

ON THE NATURE OF THE RESIDUE AFTER EXPELLING PART OF THE SULPHUR.

We have seen that, in Saxony and Bohemia, as well as by the process of M. Dartiques, that only 25 per cent. of the sulphur present in the ore is extracted, which circumstance would indicate that the residue is a combination of determinate proportions of such a nature, that the persulphuret being formed of two atoms of sulphur and one of iron, this residue will consist of two atoms of iron and three of sulphur; or that it will correspond to the sulphuret of the red oxide of iron, from which can be formed the neutral sulphate of the peroxide of iron; by exposure this salt becomes the sulphate of the protoxide of iron, which, in combination with the necessary quantity of water for crystallisation, forms copperas. Sulphuric acid is the most important of the combinations of sulphur, and a sketch of some of its properties and formation may now be given the more fully, to explain the process by which it is obtained from iron pyrites, which is now so generally coming into use, to the great benefit of so many of our mining districts, but chiefly to the mines of the county Wicklow.

Sulphuric acid is known to us in three distinct forms—first, pure or dry acid; second, combined with water, or what is usually termed, the sulphuric acid of commerce; third, in the state called glacial, or fuming, which is a mixture of pure and hydrate acid in variable proportions. Dry sulphuric acid is solid at the ordinary temperatures—liquefies at 25 deg., and instantly goes off in vapour; when crystallised it is with difficulty redissolved; its crystals are of the form of needles and stars, of a clear transparent white colour; when liquid, its density is 1·97 to 2·00—solid, it would be something more. Ordinary sulphuric acid, or hydrate acid, is an oily liquid, but not so heavy as the anhydrous acid; its density at 15 deg. is only 1·848; neither is it so caustic, although sufficiently so to decompose with rapidity either animal or vegetable material. While the anhydrous acid boils at 25 deg., the hydrous only boils at 310 deg.; the anhydrous congeals at temperatures below 25 deg., while the hydrous only solidifies at 10 or 12 deg. below zero, of the centigrade scale; it does not fume in the air, but it rapidly extracts moisture from the atmosphere, and will imbibe four times its own weight of water if exposed for a sufficient length of time, and frequently agitated. When mixed with water in certain proportions, it gives out various degrees of heat, and great cold is produced by mixing it with ice.

The discovery of sulphuric acid is due to Basile Valentine, a chemist, who lived towards the end of the fifteenth century, but it has since occupied the attention of all who have devoted themselves to chemistry. Mons. C. Desormes has explained the theory of the formation of this acid, as follows:—Having first exhausted a glass globe, he passed into it two measures of sulphurous acid and half a measure of dutoxide of nitrogen (these gases mix without uniting), two measures of oxygen were then introduced into the balloon, when immediately red vapours, due to the formation of nitrous acid, appeared, caused by the combination of the dutoxide with the oxygen added; a few drops of water being then introduced, the red vapours disappeared, and small white crystals began presently to form on the sides of the globe. According to M. Clement Desormes, these crystals are composed of sulphuric acid and dutoxide of nitrogen, united with a certain portion of water. If, at this stage, a greater quantity of water be injected, the crystals will immediately dissolve with a hissing noise, and the temperature will be sensibly raised. The water charges itself with sulphuric acid, and disengages the dutoxide of nitrogen, which, coming in contact with oxygen, returns to the state of nitrous acid, and the red vapours again appear. In this case the water added has determined the separation of the sulphuric acid, and the nitrous acid, which had given one portion of its oxygen for the formation of the crystals, is reduced to the state of the dutoxide of nitrogen, which is disengaged; but this dutoxide of nitrogen again meets with the oxygen and sulphurous acid in the balloon, where again it passes, first into nitrous acid, then into the small crystals before-mentioned; these are in their turn decomposed by the water, and so on until the sulphurous acid or oxygen be entirely consumed. We thus see how a small quantity of nitrous acid can transform an infinite quantity of sulphurous acid into sulphuric acid. M. Gay Lussac has, however, thrown some doubts on the manner in which these elements are said to be in combination; and M. Dumas is disposed to think there are some modifications, under certain circumstances, with which we are not fully acquainted.

ON THE MANUFACTURE OF SULPHURIC ACID.

Sulphuric acid is manufactured on a large scale, by permitting the fumes of sulphur, burned in a separate chamber, or the sulphurous fumes from ignited pyrites, to enter a large leaden chamber, having a few inches of water at the bottom of it, and causing the dutoxide of nitrogen to mix with it there; in some instances, and for the sake of economy, the dutoxide is obtained by decomposing sugar or starch by nitrous acid, thereby obtaining oxalic acid; but, for the most part, the nitrate of potash is placed upon shelves midst the fumes of the sulphur, thereby supplying dutoxide of nitrogen and sulphurous acid in proportions sufficiently economical. The purposes for which sulphuric acid is applied in the arts, are as follows:—In the decomposition of salt for obtaining soda—largely used in making glass, soap, &c., also muriatic acid, which is employed in so many purposes; it is the means of obtaining chlorine, and is used in the fabrication of nitric acid, as well as most of the acids known; it separates silver from gold—is an ingredient in the formation of alum—the sulphate of copper and iron; it is partly the means of bleaching, and is used in the preparation of sugar from beetroot; it is used in dyeing, and for a number of other purposes, as a secondary agent. The facility with which sulphuric acid is manufactured from pyrites, renders the distillation of sulphur a matter of less importance than would at first appear; yet the immense expense of carriage of so much extraneous matter is a subject well worthy of consideration; and having given the analysis of the nature of the residue, after expelling different portions of sulphur, we may recite a few of the useful purposes for which that residue may be employed.

REMARKS ON THE USEFUL EMPLOYMENT OF THE RESIDUE OF DISTILLATION.

We have already seen that when 50 per cent. of the sulphur contained in the persulphuret of iron is expelled, the sulphate of iron, or copperas, may be obtained from what remains. We see, however, laid that no more than 25 per cent. of the sulphur of the pyrites can be obtained without injury to the apparatus, and that, in this case, the residue would contain that portion of sulphur correspond ng to the sulphate of the peroxide of iron. Now, either of these can be turned to a profitable account. Copperas is an article of commerce in large demand; and both the sulphate of the protoxide and the sulphate of the peroxide are the basis of the fuming sulphuric acid of Nordhausen, which, although not of such general use as the ordinary acid, is yet essential to dyers for forming solutions of some of their dyes, for which the ordinary acid will not answer. At present there is but one manufactory for the formation of this acid; the internal economy of this establishment is kept secret, but we are well acquainted with the manner of obtaining this acid; the residue in this case is the red oxide of iron, long known by the name of "colcothar," or "crocus of Mars"—a powder used for giving a fine polish to steel; also used by silversmiths under the name of "rouge," and by opticians for polishing the specula of telescopes.

By a systematic arrangement of this kind, every particle of matter in the pyrites may be turned to account, and on the spot where the pyrites is obtained a very perfect process might be established to supply the market with pure sulphur, the value of the residue being sufficient to defray the cost of its extraction—time being the chief agent for converting the residue into the marketable commodities mentioned. The expense of fuel requisite for the distillation of the sulphur may be avoided, by applying to that purpose the heat given out by the combustion of pyrites in the act of forming sulphuric acid, and a great portion of the ore, after having given off one part of its sulphur by distillation, may then be used for the manufacture of sulphuric acid, where it will be still farther reduced. It is quite possible to expel all the sulphur from the iron by roasting, but it involves considerable expense in fuel; at the present time an experiment, on a large scale, is being made, to test the economy of the operation. The formation of sulphuric acid of commerce, at the same period as the fabrication of the fuming acid, would be economical, as the heat given out would distil the dry acid from the salt of the sulphate of the peroxide of iron, at the same moment as it was driving off the sulphur from the pyrites, in order to form both sulphur and the base of the salt mentioned.

ORIGINAL CORRESPONDENCE.

APPLICATION OF DRY AND WET COPPER ASSAYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Without waiting longer for the verification of "Observer's" implications, I may just suggest to him, that whilst reasoning and arguments bear their own weight, and are sometimes best anonymous, to keep clear of personality—opinions and assertions, on the contrary, rest upon authority, and it is hardly honest to give them the weight of names who have not been consulted. The following observations on the respective applications of dry and wet assaying I should have supposed needless, but for the misunderstandings, on this point, which have appeared among your correspondents.

There are two objects in assaying—one to ascertain the entire proportion of metal present—the other, to learn the quantity which can be profitably extracted. The first, for the satisfaction of the smelter, showing how much is lost in his operations, and stimulating to their improvement—the second, to ascertain the market value of the ore between buyer and seller. The first object can be effected only by the wet process, of which more presently; but it appears to me that the miner will only deceive himself if he trusts to this process to ascertain the value of his ores. Their relative value depends, not on the proportions of metal contained, but on the quantities which can be extracted with profit; and it would be a sad mistake to reckon an ore which gave, by the wet process, 2 per cent. of copper, at 1-20th the price of one giving 40 per cent.—to take the first at as many shillings per ton as the other pounds. Even by the dry process this will not always be the case; but, by making our assay as nearly as possible a miniature imitation of the smelting process, we learn, not what the ore contains, but what the smelter can get from it—and, allowing for his expenses and profit, can thus compute the value of the sample. Nor is this the only advantage of dry assaying—it returns the metal in its marketable state, and by operations at once distinct and expeditious. For commercial purposes, therefore, the dry assay is the most trustworthy—and, for distinctness and expedition, the Cornish method is excelled by none, whilst, in good hands, it may be equally relied on for comparative accuracy. How far this comparative accuracy is all the seller has to expect, is another question—Whether improvement in assaying ought not to keep place with those in smelting, and whether buyer and seller would not be likely to agree better, if the mystery of "surplus copper" was fully laid open? There is nothing impracticable in this; nor need assayers be told that ores can be worked cleaner in the crucible, where the cost of fluxes is not an object, than in the great furnace, where economy is essential. But we will not anticipate Mr. Thomas's promised lecture.

Wet assaying, to the miner, is chiefly an object of curiosity, but may also serve as an occasional comparative check upon the dry produce—its general utility is, unquestionably, to the smelter. A new kind of wet assay has been lately introduced, and has occupied a place in your columns—the electro chemical, or voltaic. This is very effective, and where porous earthenware vessels are not easily attained (for I cannot recommend the Cornish crucible for this purpose), pig's gut, or even sheep gut, answers very well. The objection of the length of time required is not very serious, as, if we put it in action at night, it is done in the morning; but the exact precipitation of the copper, where an ore has been dissolved in muriatic acid by aid of nitric, requires some practice—perhaps as much as to attain correct results from the common wet assay. Of this process (the common wet assay), the fault is not that it gives too little copper, but that, without especial precautions, it gives too much. These precautions are given in the *Mining Review*, No. XIX., July 31, 1839, and for those who have a sand heat fit to work with sulphuric acid, the following directions may be unnecessary; but as this is not possessed by many of those interested in copper assaying, some other practical instructions may be not unacceptable.

The ore, in fine powder—say 100 grs.—is to be heated in muriatic acid, and nitric acid to be added, in small portions, at intervals, shaking all well together at each addition, until the last portion of nitric acid is not decomposed, and all the metallic matter is dissolved. The proportions of both acids may be varied, according to the quantities of metal present; 1 oz. of muriatic acid is generally enough for 100 grs., but 1½ oz. may be used if the ore is very rich, and a drachm of nitric acid will generally be enough for the richest ore—it may be added ten drops at a time, at first pretty quickly—say at intervals of two or three minutes; but as the effervescence and red vapours become less copious, the intervals must be longer—say five to ten minutes. As the metallic part falls first, after shaking, a little practice enables us to distinguish when none of it is left undissolved, which may easily be effected within an hour. It is desirable to use as little nitric acid as possible, since any excess of this acid is unfavourable to the exact precipitation of the copper; on the other hand, a sufficient proportion must be employed, else, whilst most of the iron present will be dissolved by the muriatic acid, copper will certainly be left in the residue. The solution may be evaporated to dryness on the residue, or first poured off and evaporated *separately*, washing the residue with water, and adding this water to the solution for evaporation. I prefer the latter method. We may also, now, convert the solution into sulphate, by addition of sulphuric acid during the evaporation. This is attended with some advantages, as getting rid of any residue of nitric acid and of any lead which the sample might contain. It is not generally necessary where excess of nitric acid has not been used, but may be considered generally advantageous. The proportion of sulphuric acid is not required to be very exact. It may pretty generally be taken at a minim measure for each grain dissolved. For this purpose, the solution being poured off, the residue washed with a little water, and the washings added to the solution, the residue is to be dried and weighed. The difference between its weight and the 100 grs. employed gives the quantity dissolved; for example, suppose the residue 65 grs., the quantity dissolved is 100—65 = 35 grs.; add these to the solution, thirty-five minims (drop measures) of sulphuric acid, and proceed with the evaporation. This acid must be added cautiously, if the solution is hot. It will drive off the muriatic and nitric acids, as well as the fluoric, if there is present, and leaves the dry mass in the state of sulphate. This may now be treated as directed in the *Mining Review*, above quoted, except that, as the heat here employed is not supposed great enough to boil away the sulphuric acid, the further addition of this acid will not be requisite. I have been in the

practice of using only spirit of water for dilution, having never found any advantage in employing 2 lbs., as there ordered. The carbonaceous matter is easily washed away, as there stated, but this is not so fully the case with arseniate of iron, which sometimes falls with the copper when muriatic and nitric acids are the solvents—nor is it easy to prevent oxidation in drying. Both these causes falsify the assay by increasing the apparent produce in copper, and, in fact, it generally gives too much. It may be corrected by melting the produce with black flux in a small crucible, or even in a tobacco pipe, stopped at bottom, but much more readily by Plattner's process with the blowpipe, which, as this letter is long enough, shall be described in a further communication. Your's, &c.,

Plymouth, April 1. J. PRIDEAUX.

GENERAL MINING ASSOCIATION.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—No report of the proceedings of this company having ever appeared before the public, I think some notice of their late unwarrantable conduct towards the shareholders at their last meeting, held on the 11th of February, should be made known, I, therefore, hope you will give this statement a place in your Journal.

This company was formed by Messrs. Rundel and Co., in 1824. After holding out the most brilliant prospects for seventeen years, the full amount of shares were paid up last year. For the last three years so great were the profits represented to be, that assurances were made to the shareholders that, instead of any further deposits being called for (17*l.* a share at that time only having been paid), the following year a dividend, the shareholders might be assured, would be announced; when the time arrived some plausible pretext was brought forward for a further delay of the promised dividend, and the unexpected necessity to make a further call of 1*l.* a share; and thus have the shareholders, for the last three years, been duped, until the full amount of 20*l.* per share was last year paid up. At the above-mentioned meeting the directors (who, I have strong grounds for believing, have themselves been benefitting) concoct a scheme to extort a further sum of 2*l.* a share from the unfortunate shareholders, offering to such as might consent to such a further outlay 6 per cent. interest, to be paid out of the first profits, should any ever arise out of this unfortunate speculation; and the directors have the impudence to exclude all shareholders who will not submit to this further demand from any profits which may arise out of this concern till the 6 per cent. is paid—thus, in a clandestine manner, reaping any advantages amongst themselves. In all other companies a certain number of the directors go out annually, and their reports are made openly to the public, but this company, like the mysterious proceedings of the Inquisition, sit in secret council to enrich themselves out of the purses of the unsuspecting shareholders.

I am, Sir, your obedient servant,

London, March 26. AN ORIGINAL SHAREHOLDER.

[Such proceedings must be expected from all companies who dare not face the light. Why do not the shareholders, at the general meetings, insist on the reporters for the public press being present. We remember well the game played on the formation of the company. We then made extracts from the correspondence, for insertion in the *Mining Review*, but when it was found that we would not take garbled extracts, but preferred copying from the original correspondence for ourselves, we were no longer permitted to have access to the books of the company. We repeat, that it is the fault of the shareholders, they do not enforce those rights to which they can lay claim. Who, we would ask, are directors? but the paid officers of the company. In them is vested the patronage of appointments—they receive their salaries, undertaking to protect the interests of the shareholders, and to see that the sub-agents do their work—acquire information, in their public character, of which they oft avail themselves for private interest—and yet are they regardless of public opinion, and, in too many instances, as a body, pursue a course which, as individuals, they would be ashamed to acknowledge. The late failure of a director of numerous companies, whose character as a merchant stood pre-eminently high, and who, moreover, filled the office of Bank director, should be a lesson to the many.]

BRITISH IRON COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—At the special general meeting of the British Iron Company, on the 25th ult., Mr. Larpent (the chairman) uttered aspersions on my character which I consider too serious to pass unnoticed. I therefore addressed a letter to him on the subject, on Tuesday last, but, as he has not thought proper to give any reply to that letter, I rely on your justice to insert the inclosed copy of it in your Journal to-morrow, which has already, with so much ability, attracted public attention to the concerns of this ruinously-conducted company. I am, Sir, your's, &c.,

RICHARD COST.

[Mr. Cost will, we feel assured, appreciate the motive which influences us in declining to give insertion to the copy of letter addressed to Mr. Larpent, accompanying the above. We regret that many questions of an important nature are too frequently lost sight of by personalities being indulged in; and, in the present instance, we feel that the real question at issue may be merged or forgotten in the consideration of attack and defence of personal character. We have too high an opinion of Mr. Larpent, and the position he holds in society, to suppose that he would avoid entering into the general charge, and merely amuse or direct his auditory by a personal attack on Mr. Cost (which is the ground Mr. C. assumes); and, on the other hand, we should hope that the latter gentleman, having taken upon himself a Herculean task—that of cleansing the Augean stable—according to his own representations, will not allow himself to have his attention drawn from the subject. We have perused the letter addressed to Mr. Larpent, and, so far as Mr. Cost's statements go, we must say that the attacks, which we are given to understand were made, reflect discredit upon the author; but anxious as we are to expose abuses, and at all times to go with the shareholders in an inquiry, we must be excused if we decline giving insertion to a letter which, however proper it may be considered as between individuals, is not, in our opinion, one fitted for a public Journal. The letter, we think, might have been written in a more cool and temperate manner, for it appears to us that the style itself precludes the chance of a reply.]

ON DIALLING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—You have kindly permitted the insertion of many letters on dialling in your much-valued Journal, since the subject has been exhausted, in the hope, I suppose, that some practical information might be extracted from them. Presuming on your indulgence, I beg to offer a query or two, put in the form used by Mr. Budge, in your last paper, but the answers differ materially:—

Query.—Suppose a subterraneous survey has been made, containing various drifts, is it practicable to throw all those drifts into one line, and ascertain the exact length and direction of that line?—*Ans.* It is practicable, but by no means accurately; nor is it so free from doubt and uncertainty as that method which has been called "the descriptive tracing and pegging method," and for this plain reason—there is a greater variety of operations of the mind in the one of tables, and every operation of the mind is subject to error. Wrong numbers may be used when the work is performed by the use of logarithms, but if any geometrical construction be employed, great danger of error arises from the projection of the scale. There is no production of the scale in the common mode of "tracing and pegging," nor any danger from various operations of the mind—all is straight forward—and it requires no more time than a "round-house tube" survey.

Q. But how do you prove your work?—*A.* Go over the ground a second time, both underground and at surface—making the second series of drifts underground longer or shorter at pleasure. Throw the second series on the surface—if the last peg of the first series answers to that of the second series, the work is right. No mathematical calculation can give stronger proof of correctness than this; nor is there any easier, cheaper, or more correct method of taking a survey.

Mr. Budge observes, in conclusion:—"That our opponents have not ventured to touch the Gwennap case, even with the point of a feather." No, indeed, but the new version of the Gwennap story is evidently scratched into his memory with the hard point of a diamond.

I am, Sir, your obedient servant,

Perran, March 30. R. TREGASKIS.

COLLIERY INSTRUCTION.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—The annexed paragraph is taken from a northern paper:—"The tenth of a series of lectures, on popular and scientific subjects, that have been delivered once a fortnight to the inhabitants of Allerton-st, was given at that place on Monday evening, by Mr. Hunter, viewer, Backworth Colliery, to a numerous and attentive audience. Among other interesting subjects brought before the meeting, there was an account of the coal strata in this district, and of the "troubles" which have been encountered at various collieries; and these were well illustrated by diagrams and sections executed in an excellent manner. The thanks of the meeting were cordially awarded to Mr. Hunter, and as it must be admitted that the best consequences would result from imparting useful information to the colliery population, some means might surely be adopted at every colliery for promoting the mental improvement of pitmen."—*Newcastle Journal*, 20th March, 1841.—I send it to you, in hopes that, if convenient to insert it in your widely-circulated Journal, it will get more publicity amongst miners, and may induce others to follow the laudable example of Mr. Hunter, "in imparting useful information to the colliery population." The improvement of the mental, moral, and social condition of the people must ever be a subject of deep interest with the wise and good; but while endowed universities, colleges, and schools have been provided for the rich, little has been done in this way for the poor. This, probably, may be partly accounted for by that most absurd feeling of degradation usually attached to personal labour, and particularly the labour of the miner. Those who move in what is called fashionable life, erroneously imagine that the minds of the working classes are as coarse as their manners, and that to attempt to cultivate either is Utopian, or at least a Herculean task; this, however, is not the fact, we have every day evidences to the contrary presented to our notice. What working men lack in intellectual instruction, it too often comes to them through the sorrows of the heart—witness the philanthropic spark that is lighted up in the breast of the poor miner when any of his fellow-workmen are in danger, as he rushes to the rescue, and not unfrequently falls a victim to his own temerity; on other occasions he contributes out of his slender income to the necessities of his comrades when sickness or other misfortunes assail them. Many other good qualities of the heart might be recounted, which ought to put to the blush those who, "arrayed in a little brief authority," treat the poor man with insolence and as an inferior being. Working men are not only greatly interested in the advancement of education amongst those of their own class, but also in getting a better education for those that are set over them. I remain, Sir, your's, &c.,

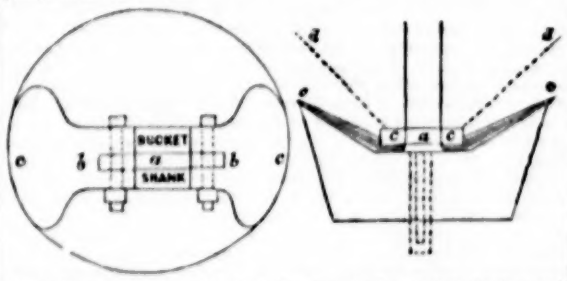
March 29. A WORKMAN.

[We are obliged to our correspondent for having directed our attention to the series of lectures referred to in his letter. It is highly praiseworthy on the part of Mr. Hunter (as a colliery viewer) to afford to those under him, as well as others employed in collieries, that information which his experience has enabled him to acquire, for it is equally to the interest of the capitalist as it is to the security and well doing of the miner, that the latter should possess more information than simply the use of the pick. Taking agents "from the ranks," is a course we have ever approved, and, without instruction be afforded them, to assist their observations underground, we fear that as is too frequently the case, agents will continue to be appointed who lack that information which can alone be useful, however scientific may be their attainments—that of a knowledge of underground works, the nature of the strata, and the work a man can do.]

IMPROVED PLAN FOR RAISING MINE PUMPS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg to hand you a plan, much simpler than the one inserted in your Journal of the 20th March, for drawing a set of pumps. Thirty fathoms were drawn north of the Tyne lately, sixteen inches in diameter, by it; the whole was done at a tenth of the expense of Arthur and Eddy's plan, and answered well.



The above is done by putting a hole through the bucket shank *a*, and in it inserting a piece of square iron, *b*, having two holes—a pair of iron falls, rather long, for the bucket shell, are by a bolt attached to the square iron bar; these are of three-eighths boiler plate, laid with steel at *c*, and ground; as the bucket is lowered, the falls rise in the direction of *d*, and find their place, and hold on appiying the strain.

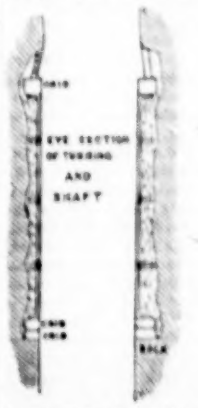
I am, Sir, your obedient servant,

Sunderland, March 23. EDWARD STANLEY.

CAST-IRON TUBBING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Having lately had the honour of directing the application of a cast-iron tub, for the stopping back of water at Mardyke Colliery, the property of the Irish Mining Company, and, as it is the first attempt of the sort in Ireland, I submit a short description of it to your notice. The colliery contains two principal seams of coal, lying at an angle of one in three. The upper one, lying at the depth of twenty-two fathoms, is exhausted; and in order to win the second seam, at the depth of thirty fathoms further, the waters of the upper seam were required to be either pumped up to the natural adit (twelve fathoms from surface), or to be



EYE PROFILE OF STRATA AT MARDYKE COLLIERY.

forced up to that point of discharge by tubbing. In order to give this project a fair chance, a piece of fire-clay, lying below the first seam, was taken advantage of as a foundation, and the shaft was rounded out to ten feet diameter. The base of tubbing is made to rest upon a pair of oaken cribs, fitted closely to the fire-clay foundation, and wedged from behind as long as ever a wooden wedge can be driven. This done, the cast-iron tub begins to be built, consisting of cast-iron segments, four feet long, two feet high, and three-quarters of an inch thick, with a rectangular flange all round, of three inches; between each of these segments are placed half-inch (end ways) fir deal, wherein to wedge; the space between the segments and the rock is also stuffed with small stones, and tightened with wood. The top of the segments was completed by a wooden crib, which was stayed fast against the superincumbent rock, and then the whole fabric underwent the most severe wedging as long as any leak continued; and, when finished, the shaft was laid perfectly dry, with the feeder of water discharging out at adit twelve fathoms above, and the sinking of the shaft resumed perfectly dry. The pressure against every square inch of the lower range of tubbing is equal to two and a half atmospheres, or about 37 lbs. per inch, and, taking the average altitude at thirty six feet, the whole tub is sustaining a pressure of about 81,200 tons; and to complete the job, that the sinking has been since carried on without any pumping apparatus, whilst sufficient water is discharging at the adit as would give employment to a heavy engine.

It is often found convenient to surmount those tubs with a sufficient quantity of stone walling, to enable the wedging to be made effective.

Some years ago I effected the "winning" of a shaft, thirty fathoms deep, at Castle Comer, in the same county, by means of a plank tubbing, of ten fathoms in length, constructed of three-inch planks, *a*, spiked against wooden cribs, *b*, and supported again by a range of inside cribs, *c*, which were in their turn cased with common deals; this mode of stopping water was practised for many years in some, previous to the invention of cast-iron tubbing.

I am, Sir, your's, &c.,

Newcastle-on-Tyne, March 23. M. DUNN.

ON THE QUESTION OF POOR RATES CHARGEABLE ON MINES IN IRELAND.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Noticing in one of your late Numbers some remarks on the question of Poor Rates chargeable on mines in Ireland, I beg to send you a copy of two enactments of the Act of Parliament, from the first of which you will perceive that half of the rate is to be borne by the landlord, and from the second it will be noticed, that any reservation in a lease by the landlord, for freedom from rates, is not applicable to the novel question of Irish Poor Rates. I am, Sir, your's, &c.,

Rathdrum, March 29. HIBERNIAN.

74.—And be it enacted, that where the person occupying such property* shall be liable to pay a rent in respect of the same, he may deduct from such rent for each pound of the rent which he shall be liable so to pay, one half of the sum which he shall have paid as rate in respect of each pound of the net annual value (whether such rent shall be greater or less than such net annual value), and so in proportion for any less sum than a pound.

77.—Provided also, and be it enacted, that any covenant or agreement whereby any person liable to pay rent, and entitled, under the provisions of this Act, to deduct therefrom any rate, or portion of rate, shall have covenanted or agreed, or shall hereafter covenant or agree, to forego such deduction, shall, so far as such rate is concerned, be of no effect.

* Properties subject to the rates—*see* Irish Poor Law Act—lands, buildings, open mines, &c.

[We are obliged to "Hibernian" for directing attention to the two clauses in the Irish Poor Law Act, appended to his note. It certainly does appear by clause 74, that the mine adventurer is entitled to deduct one-half of the rate from the rent payable, while clause 77 enacts, that if the tenant has covenanted to pay any rate, or portion of rate, he shall not be called upon to do so, so far as the poor-rate is concerned, and hence the rate must fall upon the landlord. This seems to us very *Hibernian*, and perhaps our correspondent will explain his letter in a postscript next week. *Query*.—Does rent and royalty bear the same construction.]

ON THE PURIFICATION OF GOLD.

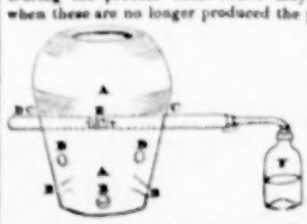
BY LEWIS THOMPSON, ESQ.

[The sum of Twenty Guineas was presented by the Society of Arts to the author, for the following communication on his method of purifying gold.]

In the common mode of assaying gold, the alloy to be assayed is subjected to two operations, cupellation and parting, each of which requires great care and skill; so much so indeed that success seems rather to be the effect of a particular tact on the part of the assayer than the result of a well-defined chemical process. The plan which I now propose for assaying and purifying gold is no less simple in execution than certain in effect, and is founded upon a circumstance long known to chemists—viz., that not only has gold no affinity for chlorine at a red heat, but that it actually parts with it at that temperature, although previously combined; that is to say, the chloride of gold is reduced to the metallic state by heat alone, it cannot, therefore, possess any affinity for chlorine when red-hot; this, however, is not the case with those metals with which gold is usually alloyed, it offers, therefore, at once an easy and certain means of separation. The application of these facts is all, therefore, to which I can lay claim, as the facts themselves have been known for many years, and the reason why they have not been so applied is, that hitherto chemists have not directed their attention to this art, but have left it entirely in the hands of the assayers, who are, for the most part, ignorant of chemistry. The process here proposed has been abundantly tested by myself and others, and employed by those wholly unacquainted with chemistry, as well as by men of eminence in that science, with equal success. There is, indeed, but one source of failure, and this arises from the intense action of chlorine upon the baser metals when melted, by which portions of the alloy are spirted up or projected from the cupel, as happens in the common mode of assaying silver when the heat is too great. This inconvenience is to be avoided in two ways. Firstly, by allowing the chlorine to be evolved slowly at the commencement of the operation, by which the intensity of the action at first is diminished, until the relative proportion of gold in the alloy is increased; or, secondly, by passing the chlorine over the alloy in powder, or laminated into a thin plate at a dull red heat for a few minutes, and then raising the temperature so as to melt it when the fumes of the metallic chlorides have visibly diminished. In conclusion, I can only add, that a very little practice will enable any one in possession of a good balance to make assays of gold with the greatest accuracy. In a course of experiments, conducted at Guy's Hospital, in the presence of Mr. A. Aikin and other scientific gentlemen, a piece of gold was twice alloyed, and then purified by chlorine, without any sensible loss when weighed in a balance which readily turned with the one-hundredth of a grain.

The furnace which I employ for the process is made out of one of those pots employed for melting steel, and which cost about 1*s.* 6*d.* each. They are from fourteen to sixteen inches in height, and consist principally of Stourbridge clay and coke. Their form is rather peculiar, as the upper part is contracted so as to form a kind of dome, as in the figure. They are so soft as to be easily cut with a knife; and I have been thus far particular in describing them, because the practical chemist will find them of great use in the laboratory for small furnace operations. One of these pots, then, is pierced near the bottom with four holes, at equal distances from each other and from the bottom; parallel to and between them, but about two inches higher up, another row of similar holes is placed, the whole of which holes should be from a half to three-fourths of an inch in diameter; about three inches above these the sides of the pot are perforated with two larger holes of at least one inch in diameter. These must be diametrically opposed to each other, and upon the same level, *i. e.* at equal distances from the bottom. The furnace is now finished.

To assay gold, place an earthenware tube in the two upper holes, and light the furnace (a mixture of coke and charcoal answers best, though coke alone will do); when the tube is seen to be white-hot, place in it the alloy contained in a little cupel made of bone-ash, and push it along to the centre of the furnace by means of a wire, then connect one end of the tube with a bottle in which chlorine is forming from a mixture of peroxide of manganese and muriatic acid; the chlorine will, consequently, pass along the heated tube and over the melted alloy, with the silver, copper, &c., of which it will combine and leave the gold pure and untouched. During the process dense fumes may be observed to fill the tube, and when these are no longer produced the process is finished; the cupel may now be withdrawn, and the gold removed and weighed.



DESCRIPTION.

A A—Steel pot.
B B B—Holes for the admission of air.
C C—Holes for the admission of the tube.
D D—The tube placed horizontally in the furnace, containing
E—The cupel and gold.
F—The bottle in which chlorine is generated.

REPORT OF ARTHUR AIKIN, ESQ., F.L.S., ETC.

The experiments above alluded to, as having been made in my laboratory, were conducted by Mr. Thompson himself, under my inspection. The gold was obtained from an assayer, and was stated to be perfectly pure; but in many instances, on being subjected at a melting heat to the action of chlorine gas, a very small diminution of weight was observed, occasioned, no doubt, by the volatilisation of a little alloy, for the button of gold underwent no further diminution whatever on a repetition of the process. The gold thus purified was mixed with silver and copper, or with silver and brass; and, being put into a small porcelain tray, with a little chalk or common salt, was slidden cautiously to the hottest part of the tube. When the alloy was judged to be melted, chlorine gas was passed in at one end of the tube, the other being left quite open or communicating with a small glass retort to collect the volatile products. A dense yellowish vapour almost immediately filled the tube, part of which concreted in filamentous crystals in the end of the tube; the remainder passed into the retort, lining it with a brownish-yellow crust, or, if a little water had been put into the retort, producing a greenish liquor, which, by the usual tests, was shown to contain chlorides of copper, zinc, and iron. The latter was, no doubt, derived from the ferruginous clay of which the tube was made, for the inside of it, after the process, was found to be nearly white.

On examining the contents of the tray, after the production of vapour had ceased, the button of gold was found imbedded in a melted mass of chloride of sodium (or chloride of calcium, if chalk had been put into the tray) mixed with chloride of silver, the presence of alkaline chloride seeming to have the property of preventing the volatilisation of chloride of silver.

In all the first trials, the button of gold was found to weigh considerably less than before the process, and the accidental breaking of one of

the tubes showed that in the part directly over the tray several globules of gold adhered, having probably been thrown up thither by the ebullition of the alloy when the chlorine was first passed over it. Having thus discovered the cause of the failure, the process was twice more repeated, taking care to give only a low red heat in the beginning, and to pass the chlorine slowly. With these precautions, the button of gold, remaining at the end of the process, was found to be exactly equal to its original weight as shown by a balance that indicated well to the $\frac{1}{10}$th part of a grain.

PROCEEDINGS OF PUBLIC COMPANIES.

BRITISH IRON COMPANY.

A meeting of the "United Shareholders" of this company took place on Friday, the 2d instant, at Castle-court, Budge-row.

Major RICHARDSON in the chair.

The CHAIRMAN proceeded to state, that in the fulfilment of the difficult duty devolving on the trustees, the first step they had taken was to obtain counsel's opinion, as to the power of the directors in enforcing payment of calls by action, which having been obtained, he was happy to say was in perfect accordance with the opinion expressed by him on former occasions, inasmuch that the opinion of counsel, confirmatory of his own, was, that no action for recovery of calls could be sustained by the directors against any shareholder. To enable, however, the proprietors present to judge whether the case was fairly drawn, or that he had fairly expressed the opinions of counsel, he would cause those instruments to be read.—[The case and opinion of counsel were then read to the meeting by the solicitor, which evidently met with their concurrence.]—He (Major Richardson) proceeded to remark, with much warmth, on the directors having shrunk from inquiry, which was, in itself, sufficient to engender suspicion, even if they were honest in their intentions, and which at once convinced the proprietors, that the only course to be pursued was one of energetic action, to prevent another million of their capital being frittered away. A Bill of Discovery had been determined upon, the result of which would prove the rights of the shareholders, and expose the system which had been pursued by the directors. Having remarked on the illegal acts of the board, in reducing the interest required to be held by them—the alteration in the capital of the company, being first reduced one-half, and subsequently increased—these, and other acts, in the opinion of the chairman, and supported as such was by a most eminent equity lawyer, satisfied him that the directors, instead of abstracting further funds from their pockets, must refund. He then proceeded at some length to enter into the several matters at issue between the directors and the shareholders, which he explained in a very lucid manner, but as they must form subject of legal discussion, we feel that we best serve the interests of all parties in not giving publicity to them. The earnestness with which the chairman has taken up the cause, aided by Mr. Cort, is highly praiseworthy, and will, doubtless, enlist many shareholders in the cause.

The several resolutions (as will be found in our advertising columns) were submitted to the meeting, and some observations having been made thereon, were passed unanimously.

On the occasion of the second resolution being moved, the CHAIRMAN strongly advocated it as a measure of vital importance; some of the proprietors had, he doubted not, heard it rumoured that the directors, despite of what had taken place, were actually concocting plans for raising the 250,000*l.* to pay Mr. Attwood by debentures; still, in the present position of joint-stock companies with the public, for his part, he had no fear of their success—even at the interest offered of 6 or 7 per cent.; they (the committee) had made overtures to the directors, with the view of coming to an amicable adjustment, but unsuccessfully. He placed implicit reliance on their counsel's opinion, and upon that he would stand or fall.

A SHAREHOLDER said, that he was not aware if the grand objection urged by Mr. Attwood was known to the gentlemen present, against the estate being given up, which was, that, under such circumstances, they would be under the necessity of removing everything from the estate; but he thought, from the symptoms he had just seen, the threats of Mr. Attwood would not have the desired effect.—A conversation on the subject ensued, and a subscription having been entered into, thanks were voted to the chairman, and the meeting separated.

We may observe, that a gentleman attended to take notes of the proceedings on behalf of the directors of the company, but, as the meeting were of opinion that he could only attend as a reporter for the press, he withdrew.

GREAT WHEAL CHARLOTTE MINING ASSOCIATION.

A special general meeting of the shareholders of this association was held on Monday last, at the George and Vulture Tavern, Cornhill, to confirm the resolutions of the 13th ult.

The advertisement calling the meeting having been read, and the minutes of the meeting of the 13th March confirmed, the manager's letter, of the 27th March, was then read, as follows:—"I have the pleasure of reporting to you the progress made in our works during the past month. The eighty-two fathom level west has been driven two fathoms, and the men have now cut through the lode, which is two feet wide, sparry, with some stones of ore. The eighty-two east has been driven two fathoms also by the side of the lode, and the men are now cutting through it; it is a hard sparry lode, with some spots of ore, but poor. There is a great deal of water coming out of each of these levels. We could not expect to meet with much ore in these levels until we got further from the shaft, as it has always been poor in the ground near the shaft. The seventy-two west has been holed to the winze from the sixty-two; it continued to improve as long as we drove it. The men who are employed in this level and in the winze are now stoping some ground where the communication between the level and the winze was made. We hope to start them to drive west in about a fortnight. The seventy-two east has been holed to the winze from the sixty-two east, and we are now stoping the back of this level. The western winze in the sixty two has been sunk three fathoms during the month; the lode is about feet wide; it has become closer and more expensive to break, but has improved somewhat in productiveness. The bargains set to-day are—The eighty-two east and west, by six men, each at 12*l.* per fathom; the western winze, by nine ditto, at 12*l.*—two fathoms long; a stope east of the winze, east of the shaft in the back of the seventy 1-o, by four ditto, at 6*l.* per fathom; a stope west of that winze, by four ditto, at 4*l.* 10*s.* ditto. The other stopes we have set out to-day, as it will be desirable to let the men break a little more ground in them before we fix their prices. We shall sample on Tuesday evening (6th April), and hope to have 120 tons or upwards. From the appearance of the stuff which we are dressing, I hope the quality of our ore will this time be better than it has hitherto been. Almost all our ore is now coming from the deep levels, as we have very few tributers working in the old pitches, which have formerly produced a good deal of ore, but at such a cost in tribute, dressing, &c., as left us very little advantage from it. When we have a machine to draw larger quantities and to crush our ore, we shall, I have no doubt, be able to increase our returns considerably, as the appearance of the lode in the western ground, between the sixty-two and the seventy-two, promises better even than when Captain Richards saw it."

After having passed a vote of thanks to the chairman and directors, the meeting adjourned.

WEST LONDON RAILWAY COMPANY.

A special general meeting of the shareholders of this company was held at their office, 11, Aldersgate-lane, on Monday, the 29th ult.

W. MORGAN, Esq. (deputy chairman), in the chair.

The SECRETARY read the advertisement convening the meeting and the directors' report, which stated that the resolution of the 7th October, 1840, had failed, in consequence of which it became the duty of the directors to recommend some new measure for their adoption; they considered that the best course to be pursued would be to bring a portion of their present line into operation as soon as possible, and they therefore proposed to lay a single line of rails from the Grand Junction Canal to the Kensington Canal Basin; to do this a sum of 80,000*l.* would be required, which it was proposed to raise by the issue of 20,000 shares, at 2*l.* per share, the shares to be at the option of the shareholders, to be taken in a rateable proportion.

Mr. DUNCOMBE rose to move the resolutions; he urged the necessity of the shareholders adopting some plan, as, unless something were done to complete it, before a long time had elapsed the proprietors would take back their land at their own [illegible]; he considered that under the proposed plan two great sources of traffic would be touched—viz., the Grand Junction Canal and Kensington Basin—the completion of which was estimated at 30,000*l.*; the remnant was for the settlement of some small accounts, all the larger creditors having agreed to let their claims stand over for twelve months.

Mr. WHITE inquired if his canal bonds were included? He wished to move some amendments, for he had never heard more fallacious representations than those made by Mr. Duncombe; the plan which he intended to propose was one that might be carried into effect for 10,000*l.*, and even less—it was for forming a line for horse traction to the Uxbridge-road; the principal advantage, he thought, would be derived from the carriage of coal, which of late had increased extraordinarily; he then alluded to the Great Western Railway having thrown their onstrapp for them, by having altered their rails at the point of intersection, and thought no advantageous arrangement could be made with them; he dissented from the proposed plan, and urged the proprietors against the adoption of it; in the absence of the most important information, he moved, as an amendment, for an adjournment to the 5th April, and so on from week to week, until the proprietors be fully informed on the subject.—Mr. SHEPHERD seconded the motion for an adjournment, and said that Mr. White's plan deserved the directors' consideration.—The motion was then put, and lost.

Mr. Duncombe's motion not having been seconded, was then put as an amendment, and, upon the show of hands being called, there appeared for the amendment, 12; against it, 13—majority against it, 1.

In reply to Lord Kensington, Mr. BIDDER stated, on the part of Mr. Stephenson, that the line could be laid down for 32,000*l.*, but Mr. Stephenson gave no opinion as to the profitable results of such plan; he observed, with regard to the continuation to the Uxbridge-road, the mere loading and unloading of coals, upon which Mr. White placed such reliance, would exceed the expense of conveyance by carts, therefore no possible benefit could arise from its completion to that point; with regard to the alteration made by the Great Western Railway Company, they had done no more than was necessary, to enable them to cross their line.

The day for the adjournment was fixed for the 5th of April, after which the meeting separated.

DUBLIN AND KINGSTOWN RAILWAY.

The annual meeting of the proprietors of this company took place at their offices, Westland-row, Dublin, yesterday week.

JOSEPH KINCAID, Esq., in the chair.

Mr. J. PIM (treasurer) read the minutes of the last meeting, and the report, which stated that the results of the last twelve months' working had been highly satisfactory—the gross income from all sources being 37411*l.* 2*s.* 1*d.* over that of the preceding year; the miles travelled by the trains amounted to 136,728, and the cost of locomotive power 1*s.* 5¼*d.* per train per mile. At the last general meeting a plan of family tickets had been adopted, which appears to have given great satisfaction, and it is expected as the advantages of this arrangement become better understood it will be more generally adopted. A new engine, the *Vauxhall*, has been constructed, with improvements in the mode of working the valves, which has had the effect of considerably reducing her consumption of fuel; two new engines are also in progress—one of which (the first ever constructed in Ireland) is very nearly completed. The profits of the past year amount to 17,182*l.* 14*s.* 9*d.*; after payment of the terminable annuity to the Board of Works, and of interest on loans, a balance of 10,159*l.* 19*s.* 2*d.* remains, from which one-eighth is to be added to the reserve fund; the directors recommended that a dividend of 4*l.* per share should be declared, which would leave a surplus of 819*l.* 18*s.* 4*d.*, to be carried to the credit of the next account. The vacancies at the board, caused by the resignation of Messrs. J. Twigg and G. M'Bride, have been filled by the unanimous election of Messrs. G. Roe and G. Pim.

The directors having stated their intention of extending the railway to Dalkey, much conversation ensued, and the suggestion appeared to be generally approved; a new station is to be erected at the terminus at Kingstown.—Thanks were voted to the chairman, and the meeting adjourned.

VAN DIEMEN'S LAND COMPANY.

The annual meeting of the proprietors of this company took place at the company's office, Old Broad-street, on Monday, the 29th ult.

W. BURNIE, Esq. (the governor), in the chair.

The SECRETARY read the report, which contained the following comparative statement of their stocks in 1839 and 1840:—It appears the total number of their stock, in 1840, was 14,052; in 1839, 9535—showing an increase in 1840 of 1517; and their comparative values were, in 1840, 45,493*l.*—in 1839, 41,608*l.*; and the value of the increase was estimated at 3996*l.* The comparative return of land under tillage was, in 1840, 1072½ acres, and, in 1839, 1031½ acres—being an increase in 1840 of 41 acres.

The CHAIRMAN then observed, that the most important feature in the report was the change of their agent in the colony—circumstances had rendered the change necessary, not that the integrity of the present agent was at all questioned. Mr. Gibson, the party selected to be the agent, was possessed of great local knowledge, and was alive to the importance of respectable tenantry on the company's property, upon which the success of the company greatly depended. With respect to the company's property in the colony, he would briefly call the attention of the meeting to that point; the original cost of the live stock on their land was 20,478*l.*, and last year it was valued at 45,490*l.*; the value of stores, &c., on hand was 20,000*l.*, and the company had 350,000 acres of land, which, including the expenditure of clearing 160 miles of road, fencing an area of 40,000 acres, &c., was valued at 218,780*l.*; while the capital advanced by the proprietors was now 180,000*l.*; their affairs might, therefore, be said to be in a prosperous state. The assignement system was now a matter for their consideration. Convicts would still be sent out, but, as it was their intention to act liberally to emigrants, he looked forward to a period when their land would be well cultivated; the survey would soon be completed of the remaining portion of their land; the company might increase their stock of sheep (now 10,000) to any extent, so that land was cleared and shelter provided. A liberal policy was that which was required in the extension of the company's stock in the colony—he, therefore, did not recommend that any dividend should be proposed this year. The difficulties that had intervened since their last meeting in the selection of an efficient clergyman had been removed, and a gentleman properly qualified would soon be sent out to the colony.

A lengthened discussion took place on the company's affairs, after which the report was adopted, and the CHAIRMAN stated that a dispatch had been received from their agent with an offer for the purchase of 10,000 acres of the company's land, which was under the consideration of the board.

The election of directors and auditors then took place, and the meeting separated.

TOWER HAMLETS CEMETERY.

A meeting of the shareholders of this company was held at the George and Vulture Tavern, on Wednesday, the 31st ult.

Mr. Deputy GREEN in the chair.

A report from the directors on the present state of the undertaking was presented. The enclosure of the site is proceeding, and it contains about thirty acres behind the Merchant Seamen's Orphan Asylum in the Mile End road, and immediately adjoins the site of the intended park for the recreation of the inhabitants of the east end of the metropolis. The report of the directors announced that leave had been obtained to introduce the bill, but that the shares already taken did not quite amount to the proportion required by the rules of the House of Commons. It also referred to the prospects of success, and the bearers were so well satisfied, that 400 10*l.* shares were subscribed for in the room.

IMPORTANT TO SHAREHOLDERS.—It is not, perhaps, so generally known as it ought to be, that all persons can procure copies of registered lists of shareholders in any of the joint-stock banks, for a nominal sum, on applying at the stamps and tax department of Somerset-house.

PROFITS OF GAS AND WATER COMPANIES.—In the House of Commons, on Thursday evening, Mr. Brotherton having moved that further proceedings on the third reading of the Birkenhead Gas and Water Works Company Bill be postponed until the 27th of April, Mr. Shaw Stuart stated, that it was the intention of Government in all future bills relating to gas and waterworks companies, to require the insertion of a clause, limiting the amount of profits to be derived to 10 per cent; he thought that this afforded a sufficient profit, and he objected to the bill now before the House proceeding any further in its present state, on the ground of its permitting a profit of 15 per cent. to be derived; he proposed that any surplus profit which should be derived should be applied to the reduction of the rates.—The motion was then agreed to.

CLEVER INVENTION FOR STONE QUARRIES.—The *Alsace* (Strasburg) states that a native of that town, named Muller, has invented a simple and cheap machine, set in motion by the force of a single dog, turning like a horse in a mill, whereby a stone in its roughest state is in five minutes cut into a regular shape fit for building, and its faces have an unusual smoothness. This machine is capable of working twelve stones in an hour, or 144 in a day of twelve hours—being equal to the labour of forty men employed for the same time. Muller (adds the Journal) possesses several quarries of stone, both hard and soft, and works his mill daily in the presence of numerous spectators.

IRON TRADE IN FRANCE.—In the year 1838 France possessed 393 furnaces, producing 2,900,000 metrical quintals of cast-iron, and 1295 furnaces for refining, manufacturing annually 1,500,000 metrical quintals of iron. At present France possesses 475 furnaces, which produce annually 3,477,000 metrical quintals of cast metal, worth 63,000,000 of francs, and 1500 furnaces for refining, which produce 2,241,000 quintals of iron, worth nearly 93,000,000 francs.

COAL IN TURKEY.—The coal raised at Heraclea promises to be of great utility to the Turkish Empire; 2000 tons have been already mined. It is of excellent quality.

We learn that Mr. Gilbertson's valuable collection of fossils, at Preston, Lancashire, have been secured to the nation, notwithstanding urgent applications for them from Paris and Vienna. They will shortly be deposited in the British Museum.—*Manchester Guardian.*

IMPROVED METHOD OF TINNING.—In another column will be found a description of the process for a new mode of tinning, by which iron is completely protected from oxidation; this is effected by forming an amalgam of iron, nickel, and tin, which is applied to the metal in the usual manner. The Editor of the *Inventors' Advocate* states that he has seen several specimens of sheet-iron tinned in this manner, in which the coating of tin seems much more perfect than is obtained by the ordinary process, and that it has been tested by submitting it to the action of the strongest acetic acid without being in the least affected. This will, consequently, prove of the greatest importance in the manufacture of tinned iron vessels, for it is well known, that the present mode of tinning affords a very inadequate protection against corrosion.

BLACKWALL RAILWAY—BREAKING OF THE ROPE.—On Wednesday morning, as the West India train, on its way to town, had reached within about eight or ten yards of the roller upon which the rope is coiled, the rope snapped in two, and six or seven yards of it, which had not reached the roller, swung about with a force and velocity which threatened instant destruction to everything within its reach. The conductor of the train, observing the danger, used every effort in his power, by means of the check-wheel, to stop the train at once, so as to prevent its coming within reach of the rope; but, finding this impossible, he with much dexterity and presence of mind, went right on and passed over the roller, intending by this means to get beyond the reach of danger on the west side of the wheel. Unfortunately he was not enabled to do so, and the train stopped in such a position, that the end of the broken rope, in its evolution, struck the hindmost carriage with such violence, three or four times, as to do it considerable injury; but at length the engine was stopped, and further mischief prevented. Fortunately seven or eight passengers, who were in the carriage that was injured, got out with great alacrity the moment the train stopped, and thus escaped injury; but had they not all been active persons, and made the best use of their limbs, there is no calculating the extent of injury that might have taken place by the occurrence. The rope was "spliced," and in about twenty minutes the train was again able to travel.—[We learn that a mile of Smith's wire rope has been supplied within the past week, which will, doubtless, ere long, be used for the entire line—the short length, which has been in action for the past eight months, being reported as good as when first applied.—ED. M. J.]

COMMERCIAL BANK OF LONDON.—We are informed that the Commercial Bank of London has purchased the premises formerly belonging to Messrs. Wright and Co., in Henrietta-street, Covent-garden, lately vacated by the London Joint-Stock Banking Company. It is also stated that the Commercial Banking Company have promised some provision, in proportion to the profits of the concern, for the family of Mr. Wright Biddulph, who has been ruined by the failure of Messrs. Wright and Co. We assume that this benefit to Mr. Wright Biddulph's family is in consequence of some wealthy members of the Catholic community having transferred their banking business to the Commercial Banking Company. No doubt they are satisfied of the solidity and good management of the concern; and, being so, their giving it their support for so worthy an object is most honourable to them in every view.

FOSSIL ORGANIC REMAINS.—Mr. Pattison, F.G.S. (of Launceston), has presented the Royal Institution of Cornwall with an interesting series of fossil organic remains from the slate quarries at Tintagel.

FROM THE LONDON GAZETTE.

Tuesday, March 30.

INSOLVENTS.

March 27.—F. Roberts and C. Rowe, New Bridge-street, Blackfriars, milliners.

30.—Thomas Dash, New Windsor, innkeeper.

BANKRUPTCY ENLARGED.

John Mace, Tottenham-court-road victualler, from April 9 to April 30.

BANKRUPTCY ANNULLED.

Thomas Robinson, Heaton Norris, Lancashire, provision dealer.

BANKRUPTS.

W. A. Bradford, Long-acre, cheesemonger. [Brown and Co., Mincing-lane.

G. Wightman, Paternoster-row, bookseller. [Warters and Co., Basinghall-street.

J. R. Hayward and W. C. Fletcher, Manchester, wholesale booksellers. [Scott and Parsons, St. Mildred's-court, Poultry.

H. Keale, Liverpool, cordwainer. [Dean, Essex-street, Strand.

J. Long, Bailey, Gloucestershire, butcher. [Chilton and Co., Chancery-lane.

F. Robbins, Birmingham, butcher. [Chaplin, Gray's Inn-square.

J. Naylor, jun., Kingston upon Hull, boat builder. [Tilson and Co., Coleman-st.

G. Pooley, Liverpool, cordwainer. [Kingston, Grand Junction-street, Bedford-row.

J. Wyke and J. Davies, Mottram in Longdendale, Cheshire, ironfounders. [Richards and Walker, Lincoln's Inn fields.

C. Battcock, Aston-juxta-Birmingham, victualler. [Miller and Fallows, Piccadilly.

A. Pedozzi, Manchester, carver. [Milne and Co., Temple.

J. Baker, Sidmouth, Devonshire, brewer. [Westmacott, Gray's Inn-square.

J. Harlow, Macclesfield, ironmonger. [Lucas & Co., Argyll-street, Regent-street.

J. Lucas, Gosport, woollen draper. [Lambert, Raymond-buildings, Gray's Inn.

J. Robinson, Salford, Lancashire, millwright. [Wilson, South-square, Gray's Inn.

R. Hardy and W. Threlfall, Lancaster, cotton spinners. [Taylor & Co., Bedford-row.

W. H. Packhurst, Stoke upon-Trent, manufacturer of mineral colours. [Weddon, Furnival's Inn.

DIVIDENDS.

April 22, T. W. Hooker, Pentonville-street, chemist—2*l.*, W. Hart, Newport, Hampshire, schoolmaster—2*l.*, H. Newton, Regent-street, silk mercer—2*l.*, S. Chappell, Lawrence-lane, butcher—J. Wells, St. Martin's-le-Grand, woollen draper—T. and T. Brown, Muscoll street, Goodman's fields, plumbers—2*l.*, G. E. Leeds and J. Yates, Fore street, wholesale haberdashers—2*l.*, W. Stephens, Leeds, woollen draper—2*l.*, J. Nicholson, Halifax, Yorkshire, innkeeper—H. Wilby, Highstown, Yorkshire, cord maker—2*l.*, W. Morris, Halifax, Yorkshire, wine dealer—2*l.*, R. Wood, Chester, innkeeper—J. Thorp, Stockport, Cheshire, carrier—4*l.*, W. M'Gill, Liverpool, draper.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or before April 20.

J. A. Chalk, Kensington place, Vauxhall-road, bill broker—J. Martin, Warwick, surgeon and Winchester street, shipowner—S. P. Ward, Liverpool, com. 9*l.* power—J. Williams, Narberth, Pembrokeshire, general shopkeeper—H. A. Isaac, Worcester, grocer—J. and C. Townsend, Leeds, printers.

Friday, April 2.

INSOLVENT.

April 1.—Thomas Garlick, Greenwich, carpenter.

BANKRUPTCY ENLARGED.

William Forster, Philpot lane, grocer, from April 9 to April 23.

BANKRUPTCY SUPERSEDED.

William Richard Kemp, Eastcheap, wholesale grocer.

BANKRUPTS.

T. and W. Wynn, Great Tower-st., tea brokers. [Pennfield, New Bank buildings.

R. G. Hebden and R. T. Clarke, Bread-street, warehousemen. [Wood and Elle, Crabtree court, Gracechurch-street.

R. Mosley and R. Keeble, Great Trinity-lane, Broad-street, Cheapside, floor factors. [Phipson, Wenlock's-head, Basinghall-street.

W. Smith, Brick lane, Spitalfields, victualler. [Lacey, Bow-lane, Cheapside.

W. Lonergan, King William-street, City, merchant. [Kirkman, King William-st.

C. Tapp, Wigmore-st., St. Marylebone, coachmaster. [——gayne & Co., Cockspur-st.

J. Sugar, Mark lane, broker. [Bolton and Merriman, Austinfriars.

J. Byng, sen., Keyworth, Leicestershire, hop merchant. [Taylor & Co., Bedford-row.

J. Byng, jun., Keyworth, common brewer. [Smith, Lincoln's Inn fields.

A. Harris, Dursley, Gloucestershire, wool broker. [Cox, Queen-street place.

H. Hawksworth, Sheffield, edge tool manufacturer. [Battye & Co., Chancery lane.

J. Watts, Wednesbury, Staffordshire, cement manufacturer. [Miller, Swan-street, Piccadilly.

J. Wilkinson, Swinesherd, Lincolnshire, wool buyer. [Bell & Co., New Chesterfield.

R. Cass, Bramwithbridge, Yorkshire, grocer. [Hawkins and Co., New Bridge-st.

J. Henderson, Glamorganshire Iron and Coal Company's Works, Glamorganshire, general shopkeeper. [Clarke and Medcraft, Lincoln's Inn fields.

J. B. Hayward, Chippenham, Wiltshire, no any occupation. [Hardy, Cursitor-street, Chancery lane.

DIVIDENDS.

April 23, W. Smith, Hatton garden, colonial merchant—J. Green, No. 10 Wharf, City road, malt factor—A. Colvin, W. Almeida, D. D. Colvin, T. Anderson, and D. Almeida, Calcutta, merchants—J. Smith, Hatton garden, cabinet maker—J. S. B. Hodges, Broad street, Cheapside, Manchester warehouseman—J. Wallis, Wardrobe street, Oxford, printer—J. W. Mason, Margaret street, Cavendish square, stereotype manufacturer—J. J. S. Smallfield, Newgate street, bookseller—S. G. C. Veal, Market street, Edgware road, tea merchant—J. W. Smith, Barnard's passage, Fetter lane, stationer—J. J. Stadler, Richmond, Surrey, butcher—May 10, W. Hyslop, Tokenhouse yard, merchant—April 30, G. Richards and T. Manning, Bridge-road, Lambeth, haberdashers—G. Tuffnell and G. Tuffnell, York street, Middlesex Hospital, tallow chandlers—S. Bowery, Penrith, Cumberland, banker—May 5, G. Eyre, Bath, surgeon—April 23, W. Tite, sen., Shirley, Essex, merchant—L. Lamb, Kingston upon Hull, paper hanging manufacturer—May 11, J. Frost, Leeds, cabinet maker—April 21, J. Burton, Manchester, plumber—23, W. Greenwood, Greenacres Moorside, Lancashire, cotton dealer—J. J. Griffiths, Manchester, merchant—24, J. Robinson, Kingston upon Hull, surveyor—26, S. Lees, Kidderminster, carpet manufacturer—24, T. Nash, Sollamscraft Saunter, Berkshire, grocer—J. W. Bowser, Reading, builder—26, G. Hanson, Manchester, victualler—23, A. Clark Market Rasen, Lincolnshire, draper—26, W. Welch, Norwich, draper—J. J. Wilson, Manchester, commission agent—26, W. Hands, Barrow, Lancashire, cotton printer.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or before April 23.

R. Melling and J. Melling, Manchester, merchants—T. A. Curtis, Tokenhouse-yard, merchant—C. G. Middleton and J. Reid, Liverpool, commission merchants—J. Rostick and J. Rostick, Woodhouse Carr, Yorkshire, stuff dyers—M. Worthington, Clitheroe, Lancashire, innkeeper—R. Parfitt, Manchester, ale merchant—A. D. Bellenden, Gracechurch-street, tailor—W. Morrison, Pancras-street, Tottenham-st., tinman—B. Davis, Waterloo-st., Kent, innkeeper.

LATEST PRICES OF FUNDS, SHARES, ETC.

ENGLISH FUNDS.

Consols Money, 89⅞ ¾	New 3½ per Cents., 98½ ⅝
Ditto Account, 89⅞	Exchequer Bills, 9 11 pm.

FOREIGN FUNDS.

Belgian Bonds, 5 per Cent., 100 1	Portuguese, 5 per Cent., 34 ½
Brazil, 5 per Cent., 68½ 9½	Ditto, 3 per Cent., 20½ ¾
Danish, 3 per Cent., 77½ 78½	Spanish, Actives, 5 per Cent., 23½ ⅜
Dutch, 2½ per Cent., 51½ ⅝	Chili, 6 per Cent., 59 61
Ditto, 5 per Cent., 97½ ⅞	Colombian, 6 per Cent., 23 ¼
Russian, 5 per Cent., 110½ 111	Mexican, 5 per Cent., 31½ ⅝

SHARES.

London & Blackwall R'way, 6 5½ dis.	Great Western, 27 8 pm.
London and Brighton, 4½ 3¾ dis.	Ditto ½ Shares, 13 14 pm.
London and Croydon, 12½ 13 per sh.	North Midland, 24 5 dis.
London and Birmingham, 45 7 pm.	South-Eastern, 15½ 15 dis.
London & Sh. Western, 55 6 per sh.	Colonial Bank, 8½ 9½ pm.
Eastern Counties, 14½ 13⅞ dis.	London & Westminster, 2½ 3 pm.
London and Greenwich, 8 ½ per sh.	London Joint-Stock, 2 ½ pm.

MONEY MARKET AND CITY NEWS.

SATURDAY.—Although the general feeling in the English stock market is in favour of advance, the anxiety felt for the arrival of the *President* accounts for there having been no extensive transactions entered into.

In the foreign securities the only matter that requires alluding to is the improvement in Portuguese stock, some speculative purchases having been made; the 5 per Cents. were finally quoted 32½ to 33, and the 3 per Cents. 19½ to 20.

Railway shares have been steady, with a fair business.—London Joint Stock Bank, 11⅞ to 12; Union of Australia, 32.

MONDAY.—An uneasy feeling still existing as to what news will be brought by the *President*, the English stocks have been in rather an agitated state. Consols for Money opened 89⅞, declined to 89⅜, and left off 89⅜ to ½; for the Account they opened 89, touched 89⅜, and closed 89 sellers. New 3½ per Cents. left off 97½; and Exchequer Bills, 5s. to 7s. pm.

Business was principally directed to Portuguese stock, which was in speculative demand at the high price of 33 ½, and even reached 33⅞ during the day, but, after the meeting of bondholders, held this morning, its value suddenly declined about 1 per cent., closing very unsteady. The opening price of the 5 per Cents. was 33⅞, went back, after an advance to ¾, to 33, and finally closed 31½ to 3; the 3 per Cents. were last quoted 19½ to 2, after being 20½; Spanish Actives closed 23½ to ⅝; Dutch 2½ per Cents., 50⅞ to ¾; ditto 5 per Cents., 99⅞ to 100¼; Colombian, 21⅞ to 2¼; and Mexican, 29⅞ to 30⅛.

Birmingham shares were last quoted 61 to 3 pm., ex the new shares; Brighton, 6 to 5½ dis.; Blackwall, 6 to 5½ dis.; Great Western, 24 to 5 pm., ex div.; ditto new, 11½ to 12½ pm., ex div.; North Midland, 26 to 4 dis.; ditto new, 3½ to 2½ dis.; Gosport, 4½ to 5½ pm., ex div.; South-Eastern, 16½ to 15½ dis.; and Greenwich scrip, 4½.—Imperial Brazilian Mining Association, 5 to 7; Rhymney Iron Company, 25 to 24½; United Mexican new scrip, 1½.—Australasian Bank 54; London Joint-Stock, 1 ½; London and Westminster, 22½; Provincial of Ireland, 4½.

TUESDAY.—The principal business transacted to-day in the English funds was investment, but some sales by the East India-house broker for a time triflingly depressed prices. Consols for Money opened at 89⅞, receded to 89⅜, and closed at 89⅝; for the Account they fluctuated between 89⅜ and 89, and closed at 89⅝ to 89. Exchequer Bills, in consequence of purchases, rose to 6s. to 8s. pm.; and New 3½ per Cents. left off at 97⅞.

Very little has been done in the foreign securities, and the general appearance of the market is flatter than yesterday; the sudden improvement in the value of Portuguese stocks, which took everybody by surprise, has not since been by any means firmly supported.

Railway shares are rather firmer, without any material alteration in price.—Rhymney Iron Company, 25 to 4½.—Colonial Bank, 33½ to 4; Union of Australia, 32½ to ½.—Anglo Mexican Mint, 10½.

There was not much done to-day in the foreign exchanges. The rate on Paris remained the same as last post, but Amsterdam and Hamburgh were rather higher.

The premium on gold at Paris is 6 per mille, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 25. 3½, and the exchange at Paris on London at short being 25. 40, it follows that gold is 0 40 per cent. dearer in London than in Paris.

By advices from Hamburgh the price of gold is 435 per mark, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 13. 4½, and the exchange at Hamburgh on London at short being 13. 5⅞, it follows that gold is 0 41 per cent. dearer in London than in Hamburgh.

WEDNESDAY.—The Consol market in the early part of the day was stationary; but some purchases subsequently made by influential brokers rallied prices, which closed firm at a trifling advance upon yesterday. The East India Company have to-day raised the interest of their bonds from 3 to 3½ per cent., which has improved their standing in the market. Consols for Money were first quoted 89⅞, and closed 89⅞; for the Account they opened at 89, reached 89½, and closed 89 to ½. India Bonds have been quoted at 5s. and 9s. dis. New 3½ per Cents. left off 97½, and Exchequer Bills 6s. to 8s. pm. Money has been in some demand to-day at high rates; as much as 8 per cent. has been offered for accommodation from day to day, but the nearer value is considered to be about 4½ per cent.

With a demand for money, at about 7 per cent., the settlement in the foreign securities passed over without difficulty, and its only characteristic was the firmness of the market at the conclusion of business, with a slight advance in the South American and Peninsular bonds.

The value of railway shares has rather increased to-day, but the pressure of money existing in the other markets has, in a measure, counteracted the otherwise better tendency.—British Iron Company, 64 dis.—Australasian Bank, 54; National of Ireland, 13; Union of Australia, 32½.

The *Britannia* mail steamer, belonging to Mr. Cunard's line, arrived on Wednesday morning at Liverpool, from Halifax, after a speedy but rough passage of thirteen days, bringing accounts from New York to the 15th, and Boston to the 16th ult., inclusive. The intelligence thus received, which has been so anxiously looked for, is not of importance. The affair of M'Leod was still *in statu quo*, and himself in prison at Lockport, awaiting his trial, to which, however, it was not thought he would be brought. Rumours prevailed, that our minister, Mr. Fox, had demanded the release of M'Leod, or his own passport, but the statement is not founded upon authority. The boundary question remained also untouched since our last advices. The papers brought by the *Britannia* has anticipated the *President*; the latter vessel sailed from New York on the 11th ult., and has now been twenty days at sea.

THURSDAY.—The arrival of the *President* steamer has so long been an object of anxious expectation among the City speculators, that it is easy to conceive the interest that was felt on receipt of intelligence by the *Britannia* to a still more recent date than the *President* would have brought. The news is considered to be of a decidedly favourable character, and the quotation of Consols shows the action which it has had on the price of the public securities. The advance was ½ per cent., which was maintained throughout the day, the only fluctuation being that there were sometimes buyers and sometimes sellers at the advanced quotation, while the firmness of the market was sustained by frequent purchases, chiefly of a speculative character. It should be remarked, that the decided operation of any news of a favourable kind is greatly increased by the dislike of foreign securities, which has now so generally spread, so that the English funds being almost the only means of investment, they are always ready to advance at the slightest impulse.

Consols for Money opened at 89⅞, touched 90⅛, at which price they closed firm; for the Account the opening price was 89⅞, then they fluctuated between 89⅞ and ⅞, and left off at 89⅞ to ⅞. New 3½ per Cents. closed at the advanced price of 98; India Bonds, 3 dis.; and Exchequer Bills, 7s. to 9s. pm.

In the foreign securities, although not much business was transacted, there was an increased appearance of stability, the result of the better state of our own funds. Upon the Mexican stock the accounts from Texas seem to have had a particularly favourable effect.

With improved quotations the railway share-market closed firm.—London and Westminster Bank, new, 7½.

FRIDAY.—So much animation in the funds has not been witnessed for some time past as to-day in the Stock Market, and prices were proportionally on the advance. Consols for Money reached 89⅞, and for Account at buyers, which may be ascribed to the fact of the speculators for the fall taking the alarm at the favourable turn of political affairs on the side of the United States, and buying in their accounts accordingly.

From the commencement of business speculation was for the rise, and an advance of nearly ½ per cent. took place, so that there has been a rise (a very unusual one of late) of nearly 1 per cent. within these last two days. At the close of the market, however, prices were a shade lower than at their highest quotation, but the decline was so very trivial that it could only be supposed one of those ordinary fluctuations which usually follow an important rise. There is no pressure for money in the Stock Exchange, but nevertheless it fetches about 4 to 4½ per cent. Consols for Money opened 89⅞, and closed 89⅞; for the Account they touched 9 ⅛, and closed 89⅞. India Bonds were finally quoted 2 pm.; New 3½ per Cents., 98⅞; and Exchequer Bills, 9s. to 11s. pm.

The foreign securities were generally firm, and Portuguese stock obtained a further advance, the 5 per Cents. leaving off 34 to ½, and the 3 per Cents. 21⅞ to ⅞. Spanish Actives were finally quoted 23⅞ to ⅞; Colombian, 23 to ½; Dutch 2½ per Cent., 51½ to ⅞; ditto 5 per Cents., 97⅞ to ⅞ ex div.; Brazilian, 68½ to 69½ ex div.; Belgian, 101 to 101½, and Danish, 77½ to 78½ ex div.

The steady dealings in railway shares are also higher. Birmingham closed 63 to 67 pm. ex div.; Brighton, 4½ to 3⅞ dis.; Blackwall, 6 to 5½ dis.; Great Western, 26 to 28 pm. ex div.; ditto new, 12 to 14 pm. ex div.; North Midland, 24 to 23 dis.; ditto new, 21 to 1½ dis.; Gosport, 4½ to 5½ pm. ex div.; and South Eastern, 15½ to 13 dis.—Commercial Bank of London, 10.—Anti Dry Rot, registered, 2 to 1½.

The amount of business transacted to-day in the foreign exchanges was not very considerable; but the supply of bills, though not large, was fully adequate to the demand, and there was, generally speaking, a trifling improvement in the rates on most places.

Papers from Rio Janeiro to the 28th of January have been received. The 6 per Cent. local stock was quoted 74½ to ½, and the exchange upon England 30¼d.

LATEST PRICES OF IRISH STOCKS.—3 per Cent. Consols, 89⅞—1; Stock, 89⅞—Ditto New, 1806, 89⅞—3½ per Cent. [illegible] 87—Bank Stock, [illegible]—Kingstown Railway, 7½—Drogheda, 7½—National Insurance Company, 2—City of Dublin Steam Company, 11—ditto stock, 1835, 12—British and Irish Steam Company, 8½—Hibernian Bank, 30½—Royal Bank 1—Mining Company of Ireland, 13½—Wicklow Copper Mine, 9½.

AMSTERDAM, March 30.—Actual Debt, 2½ per Cents., 50½ to 51; ditto 5 per Cents., 97⅞ to 98⅞; Amort Synd., 4½ per Cents., 8½ to 8½; 3½ per Cents., 71½ to 71½; Commercial Company, 3½ per Cents., 1½ to 1½; Loan, 1832, 5 per Cents., 90⅞ to 90⅞. Exchange on London, 12 05; two months, 11 95; ditto on Hamburgh, 35 0⅞; two months, 35 4½.

BERLIN, March 28.—St. Schuld Sch., 4 per Cents., 102⅞ to 103½; Prussian English Bonds, 1830, 4 per Cents., 100⅞ to 100⅞.

PARIS, April 1.—3 per Cents., 112f. 80c.; 4 per Cents., 102; 5 per Cents., 79f. 5c.; Bank Actions, 3 ,0f; Rente de Naples, 102f.; Romans, 103; Spanish 5 per Cents., 23⅞ to ½; ditto Passives, 5⅞; Belgian 5 per Cents., 101½, 101½; ditto, Bank, 770f.; ditto 3 per Cents., 7½ [illegible]; Belgian Bank, 760f. [illegible]—Versailles Railway, R. B., 370f.; ditto L. B., 175f.; Orleans, 460f.; Strasburgh to Bâle, 205f. [illegible]; Mulhausen to Thann, 275f. Exchange on London, one month, money, 25f. 25c.; ditto three months, paper, 25f. 17½c.; money, 25f. 15c.

HAMBURGH, March 30.—Austrian 5 per Cents., 105 money; Bank Shares, 1620 bills, 1611 money; Russian-English Loan, 107½ bills, 107 money; 5 per Cent. Hamburgh Certificates, 1024 bills, 102 money; 5 per Cents., 1st Series Inscriptions, 101 bills, 100½ money; Hope and Co., 3d and 4th series, 99½ bills; ditto, in Certificates, 98½ bills; Dutch New 4 per Cents., 98½ bills, 98⅞ money; Actual Debt, 2½ per Cents., 49⅞ bills, 49⅞ money; Polish Bonds, 141½ bills; New Tickets, 162 bills; Danish-English Loan, 3 per Cents., 74 bills, 73⅞ money; Spanish New 5 per Cents., 15½ bills. Exchanges on London—Hamburgh, March 30, 13 6½; two months, 13 4; St. Petersburgh, three months, 38 11-16; Stockholm, March 23, seventy-five days, 11 45.

LEEDS, Thursday.—Since our last report of the market from this place we have been kept in a constant state of hope and fear respecting the news that has been daily expected from America, and now that is at last come, although it cannot be said to be unfavourable, yet confidence is by no means re-established, nor is it likely to be until something positive is decided upon. As we incline to the opinion that no war will take place, we look forward to a considerable improvement in shares generally, especially in those lines that are more dependent than others on the state of the money market. Considering the present unsettled state of things, the money market wears anything but an uncheerful aspect. North Midlands here are very firm at 75l. to 75½l., whilst Manchester and Leeds are weak at 2l. to 2½l. dis., and if what we hear of these shares be correct, the present prices will not be sustained. Leeds and Selby are rather advancing, 91l. can now be got for them, and we have no doubt that these shares will run up 2l. or 3l. within the present month. Sheffield and Rotherham Rails continue singularly quiet, at 7l. pm. ex div., whilst York and North Midlands are very strong at 79l. to 80l. Hull and Selbys are quite timid at 43½l.—North Midland Railway, 74½l.; York and North Midland, 79½l.; Leeds and Selby, 91l.; Hull and Selby, 44½l.; Great North of England, 85l.; Manchester and Leeds, 67½l.; Sheffield and Rotherham, 32l. ex div.—Leeds Banking Company, 19l.; Leeds and West Riding, 9½l.; Leeds Commercial, 4l.; Yorkshire District, 9¾l. on 17½l. paid; Yorkshire Agricultural and Commercial, 4l.; York City and County, 36l.; York Union, 17½l.—Leeds and Liverpool Canal, 760l.; Barnsley, 29l.; Huddersfield, 78l.; Rochdale, 86l.—Leeds and Yorkshire Assurance Company, 10½l.—Leeds Old Gas Company, 19½l.; Leeds New Gas Company, 30½l.—Leeds Commercial Buildings, 23l. R. B. WATSON & Co.

HULL, Thursday.—There has been, during the past week, no feature claiming particular remark. North Midlands have advanced. Hull and Selbys are a shade lower. Leeds and Selbys stationary. Flax and Cotton Mill shares have been done at an improvement of 2l. per share (107l.), and Shipping Company's at the price marked.—Birmingham and Derby Railway, 72l.; Edinburgh and Glasgow, 34½l.; Grand Junction, 204l.; Great North of England, 85l.; Great Western, 90½l.; Hull and Selby, 44l.; Leeds and Selby, 90l.; Liverpool and Manchester, 188l.; London and Birmingham, 154l.; Manchester and Leeds, 69l.; Midland Counties, 86l. to 87l.; North Midland, 74½l. to 75l.; York and North Midland, 79l.—York City and County Bank, 36l.; Yorkshire District, 7½l.; Sunderland Joint-Stock, 4½l.—Hull Dock Company, 120l.—Hull Shipping Company, 10l.—Hull Flax and Cotton Mills, 107l. COLLINSON & FLINT.

BRISTOL, Thursday.—The American news received by the *Britannia* steamer not being of a decisive character, our market remains stationary, but firm at my quotations.—Great Western R'way, 90l. to 90½l.; ditto halves, 62l. to 62½l.; ditto fifths, 10½l. to 10l.; Bristol and Exeter, 35l. to 35½l.; Cheltenham Union, 26l. to 26½l.; Birmingham and Gloucester, 78l. to 79l.—Bristol Gas Company, 32l. to 33l.; Clifton Gas, 78l. to 79l. LUKE ARNOLD.

EDINBURGH, Thursday.—Grand Junction Railway, 204l.; Liverpool and Manchester, 188l.; London and Birmingham, 152l.; Great Western, 90l.; Edinburgh and Glasgow, 34l.; Edinburgh, Leith, and Newhaven, 1l. 13s. 6d.; Dalkeith and Edinburgh, 29l.; Glasgow and Greenock, 21l.; Glasgow and Garnkirk, 28l.; Glasgow and Ayrshire, 38l.; Wishaw and Coltness, 76l.; Dundee and Arbroath, 27½l.; Arbroath and Forfar, 22l. ROBERT ALLAN.

LIVERPOOL, Thursday.—We have had a very steady, and gradually rising market during this week, without much business being done; a few speculators have maintained the prices, but purchasers have not freely come forward. The news from America, by the *Britannia*, has not caused any effect; we must wait the next arrival, which will be more decisive.—Chester and Birkenhead Railway, new shares, 16½l.; Eastern Counties, 8½l.; ditto debentures, 7l.; Glasgow, Paisley, and Greenock, 23½l.; Grand Junction, 2 5l.; ditto half shares, 102½l.; ditto quarter shares, 78½l.; Great Western, fifth shares 10½l.; Leicester and Swannington, 54l.; Liverpool and Manchester, quarter shares, 45½l.; London and Birmingham, new thirds, 23½l.; London and Brighton, 41½l.; London and South Western, 55l.; Gosport Extension, 42½l.—Union Bank, 1⅛l. RICHARD DAWSON.

MANCHESTER, Thursday.—There is no material alteration in the state of this market. Manchester and Leeds, 67½l.; ditto, halves, 29l.; London and Birmingham, 154l.; Leicester and Swannington, 54½l.; Edinburgh and Glasgow, 34½l.; Liverpool and Manchester, 188l.—Manchester Assurance, 9½l.—Manchester and Liverpool District Bank, 14l. 18s. 9d.

BIRMINGHAM, Thursday.—London and Birmingham Railway, 155l.; Great Western, 25½l. pm.; London and South-Western, 54½l. to 55½l.; London and Brighton, 4l. dis.; Eastern Counties, 14½l. dis.; Birmingham and Derby, 29l. to 27l. dis.; Birmingham and Gloucester, 21l. dis.; Bristol and Exeter, 14l. dis.; Cheltenham and Great Western, 34l. dis.; Gosport Junction, 5l. pm.—*Midland Counties Herald.*

BANK OF ENGLAND.—Quarterly Average of the Weekly Liabilities and Assets, from the 4th of January, to the 30th of March, 1841, both inclusive:—

LIABILITIES.		ASSETS.	
Circulation	£16,337,000	Securities	£21,328,000
Deposits	7,313,000	Bullion	4,339,000
	£23,749,000		£26,667,000

EXPORTATION OF GOLD AND SILVER.—By the official return published by the Customs, the export of the precious metals from the port of London to foreign and colonial ports, for the week ending Thursday, the 25th ult., was as under:—

Silver coin to Hamburgh	280,000	ounces.
„ Belgium	17,000	„
„ Calais	100,000	„
„ Mauritius	84,300	„
Silver bars to Hamburgh	39,000	„
Gold coin to Ceylon	250	„

SALE OF COPPER ORES AT POOL

Sampled March 17, and sold at Serpell's, Pool, April 1.

Mines.	Tons.	Price.			Purchasers.	Mines.	Tons.	Price.			Purchasers.
E. Crofty	91	5	3	6	Williams.	East Pool	90	7	5	6	English Co.
ditto	42	4	7	6	Vivians.	ditto	80	5	13	0	Williams.
ditto	42	4	7	6	Williams.	ditto	79	6	18	0	Freemans.
ditto	76	3	1	6	——	ditto	48	8	1	0	——
ditto	72	0	10	6	——	ditto	28	.	0	0	Vivians.
ditto	65	6	18	6	Freemans.	Fowey C.	105	6	15	6	Nevill & Co.
ditto	62	2	7	6	Williams.	ditto	80	5	16	6	Vivians.
ditto	52	3	16	6	Vivians.	ditto	80	5	7	6	
ditto	51	2	0	6	——	Stray Park	77	6	16	6	Williams.
ditto	48	4	13	6	Williams.	ditto	37½	5	15	0	Nevill & Co.
ditto	41	6	9	6	——	ditto	37½	5	15	0	Williams.
Longclose	48	7	19	0	——	S. Basset	60	12	1	0	Nevill & Co.
ditto	42	3	4	6	P. Grenfells.	ditto	45	7	14	6	Williams.
Dolcoath	92	7	3	0	Williams.	ditto	38	4	13	0	——
ditto	81	1	11	0	——	West Jewel	45	5	2	6	Nevill & Co.
ditto	63	6	14	6	Vivians.	ditto	42	10	0	6	Mines Royal
ditto	45	3	8	0	——	ditto	13	7	9	0	——
ditto	42	7	0	0	Nevill & Co.	Carzise	74	6	0	6	Vivians.
ditto	40	5	7	6	Vivians.	ditto	15	8	9	6	——
United H	90	4	1	6	——	W. Harriet	67	3	4	6	——
ditto	83	4	8	6	——	W. Clifford	28	9	4	0	Mines Royal
ditto	77	4	19	6	English Co.	ditto	25	9	6	6	Nevill & Co.
ditto	41	12	13	0	Freemans.	W. Sparrow	16½	5	14	6	Mines Royal
ditto	23	3	0	6	English Co.	ditto	16½	3	4	6	English Co.
ditto	12	2	0	6	Vivians						

TOTAL PRODUCE.

					Mines	Tons			
East Wh. Crofty / Longclose	731	£ 3283	4	0	South Wh. Basset	151	£ 1343	14	6
Dolcoath	363	1940	3	6	West Wh. Jewel	100	740	10	6
United Hills	329	1779	13	0	Carzise	89	579	4	6
East Pool	325	2130	3	0	Wh. Harriet	67	229	0	6
Fowey Consols	174	1032	16	0	Wh. Clifford	53	482	13	0
Stray Park	152	948	11	6	Wh. Sparrow	33	148	10	6

Average standard, 124l. 4s.—Average produce, 7.—Average price, 5l. 19s. 6d.—Quantity of ore, 2800 tons.—Quantity of fine copper, 199 tons 5 cwt.—Amount of money, 16,646l. 7s. 6d.—Average standard of last sale, 124l. 10s.—Average Produce, 6½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.		
Mines Royal	87½	£ 804	3	3
English Copper Company	208½	1264	1	3
Vivian and Sons	832	4098	14	6
Freeman and Co.	183	1090	5	6
Grenfell and Sons	42	218	8	0
Sims, Willyams, Neville, Druce, and Co.	335½	2312	16	4
Williams, Foster, and Co.	931½	5299	16	0
Total	2800	£16,646	7	6

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Fowey Consols, 481; Wheal Friendship, &c., 406; Wheal Virgin, 198; Wheal Treweran, 180; Levant, 153; Wheals Unity Wood and Union, 141; Wheal Providence, 111; Tresavean Consols, 100; Providence Mines, 85; Wheal Speed, 80; Bassett's Ores, 80; Marazion Mines, 76; Wheal Mouse, 60; Wheal Mary, 34; Trevaskus, 33; Wheal Plenty, 16.—Total, 2380.

No sale on Thursday week.

SALE OF BLACK TIN,

Sold on the 26th of March, at Trevaigia Mine.

Mines.	Tons.	Price.	Amount.	Purchasers.
Trevaigia	45	56 17 6	£ 251 9 9	Williams and Co.

COPPER ORES SMELTED BY THE MINERS' COMPANY.

Copper Ores Smelted, by contract, by the Governor and Company of Copper Miners in England to the 31st March, from the undermentioned mines:

Mines.	Real weight.		
Carn Brea Mines	2041 t.	5 c.	2 q.
Cook's Kitchen	251	1	1
Grabington	643	5	2
Duffield	153	12	0
Wheal Julia	241	4	0
Wheal Darlington	1570	11	0
Wheal Trenwith	13	0	0
St. Ive's Consols	20	2	3
Tin croft	134	10	0

Total quantity, [illegible] tons (21 cwt.), 4 cwt.—Average produce, 7½.—Metal, 332 tons.

SALE OF COPPER ORES AT SWANSEA.

Copper ores for sale April 7.—Cobre 90, ditto 67, ditto 62, ditto 60, ditto 46, ditto 40, ditto 91, ditto 86, ditto 80, ditto 70, ditto 48, ditto 70, ditto 60, ditto 59—Knockmahon 132, ditto 87, ditto 87, ditto 74, ditto 67, ditto 33, ditto 27—Chili 106, ditto 98, ditto 45, ditto 30, ditto 64, ditto 84, ditto 36—Cuba, 66, ditto 57, ditto 16—Tigrony 22, ditto 16—Cronebane 16—Total, 2147 tons.

PRICES OF MATERIALS IN CORNWALL

AS SUPPLIED AT THE PRINCIPAL MINES IN THE FOLLOWING MONTHS.

	9 & 10		11 & 12			9 & 10		11 & 12	
Common iron, per cwt.	8s	10d	8s	6d	Iron-wire sieves, each	2s	3d	2s	8d
Half-inch square ditto	9	10	11	0	Iron-wire work, per foot	.	6	.	6
Best tough whim chain	29	0	30	0	Board nails, per cwt.	19	6	17	6
Boiler plates	13	0	13	6	Half-board ditto, per 1000	5	0	5	0
Hoop iron	12	0	12	0	Hatch ditto	3	8	2	8
Nail rods	11	6	12	6	Half-hatch ditto	3	0	3	0
Miners' shovels	32	0	32	0	Linseed oil, per gallon	2	8	2	6
Charcoal iron	13	6	13	6	Rape ditto	3	6	3	3
Gunpowder, per 100 lbs.	40	0	40	0	Birch, per foot	1	7	1	7
Leather, per lb.	1	10	1	10	Pine,	1	6	1	6
Coals, per ton, at quay	16	0	12	0	Sheet lead, per cwt.	21	6	21	0
Candles, per dozen lbs.	6	0	5	9	Barrow bends	11	6	11	6
Tallow, per cwt.	51	6	52	0	H 2 steel (112 lbs.)	32	0	30	0
Ropes	38	0	36	0	2s. nails	16	10	16	10
Flat ropes	43	0	50	0	Pick hilts	1	6	1	6
Hemp	0	4½	0	4½	Shovel hilts	1	9	2	0
White yarn, per cwt.	37	0	37	0	White ground lead	22	0	23	6
White rope	33	0	34	0	Red lead	25	0	25	0
Brass-wire sieves, each	3	7	3	9	Best rolled iron	11	6	11	6
Ditto machine	13	0	13	0	Blistered steel	40	0	40	0

. The figures at the top of the columns refer to months—as 1 Jan., 2 Feb., &c.

LATEST CURRENT PRICES OF METALS.

LONDON, APRIL 2, 1841.

		£	s.	d.			£	s.	d.
IRON, Eng.—Bar	ton 0 0 0 to	8	0	0	COPPER—Foreign (dy. 37s.)		—		
Do. Carg. in Wales		7	0	0	TIN, Brit.—Blocks	cwt	4	2	0
Hoops	ton	10	10	0	Bars	do.	4	4	0
Sheets	ton	11	10	0	Banca 0 0 0 to		3	15	0
Pig, No. 1	ton	5	0	0	Straits 0 0 0 to		3	13	0
Do. in Wales		4	5	0	Tin Plates—I.C. (box) 1 11 0 to		1	14	0
Foreign—Swedes, cn. bd. (Duty 30s. per ton.)	ton	14	5	0	I.X. do. 1 17 0 to		2	0	0
Russian com.	ton	14	10	0	(Others in proportion.)				
P.S.I.	ton	15	15	0	LEAD, Brit.—Pig	ton	20	10	0
C.C.N.D.	ton	18	10	0	Sheet	ton	21	10	0
STEEL, Eng. Blistered, 25 0 0 to		45	0	0	Shot	ton	22	10	0
shear do. do. 45 0 0		84	0	0	Red	ton	21	10	0
Cast do. do. 45 0 0		84	0	0	White (dry)	ton	26	10	0
Foreign—Swedes in kgs bd. (Duty 20 per cent.)	ton	20	0	0	Do. (gd. in oil)	ton	24l a 28l		
Do. Faggots bd.	ton	21	0	0	Foreign—Span. (dy. 40s.)		19	15	0
Milan bd.	ton	0	0	0	SPELTER 0 0 0 to		26	10	0
COPPER, Brit.—Cake	ton	100	0	0	For delivery 0 0 0 to		25	10	0
Tile	do.	98	0	0	English Sheets		39l a 41l		
Sheets	lb.	1 1½d to 1s			QUICKSILVER—(dy. 1d. per lb.)		0	3	11

REMARKS.—Iron, steel, and copper, steady.—Tin, heavy.—Tin plates, firm.—Lead, dull.—Spelter, firm.—Quicksilver, steady.

COAL MARKET, LONDON.

MONDAY.—Price of coals per ton at the close of the market:—Adair's Main 17—Blaydon 15 3—Hepburn 18 6—Original Windsor Pontop 18—Smith's Pontop 16—Tanfield Moor 20 6—Wylam 17—Wall's End Bewicke and Co. 20 6—Gosforth 20 6—Hotspur 18—Killingworth 20—Riddell's 20 3—Walker 20 3—Belmont 21 9—Hedly 19 6—Haswell 22 9—Hetton 22 9—Lambton 22 9—Russell's Hetton 22 9—Stewart's 22 9—Howden Hartlepool 20—Whitwell 21—Caradoc 22 9—Kelloe 22 6—Seymour Hartlepool 20—Adelaide 21 9—Seymour Tees 20 6—South Durham 20 6—Tees 22—Wilton Park 18—Hartley 18 6.—Ships arrived, 151.

WEDNESDAY.—Adair's Main 17—Derwent 16—Hepburn 18 6—Holywell 18—New Garesfield 15 3—Ord's Redheugh 15 6—Wylam 18 9—Wall's End Hilda 19 6—Northumberland 18 6—Bell 19 6—East Hetton 20 6—Pemberton 20 6—Haswell 22 9—Hetton 22 9—Lambton 22 9—Stewart's 22 9—Howden Hartlepool 20—Gordon 18—Tees Hetton 18 6—Howard's Netherton Main 16 9—Worsborough Park 16—Devonshire 19.—Ships arrived, 41.

FRIDAY.—Bell Robson's Hartley 17—Holywell Main 18—Smith's Pontop 15 6—Wylam 16 9—Wall's End Clennell 16—Gosforth 20—Heaton 19 6—Hilda 19—Killingworth 18 6—Braddyll's Hetton 21 9—Haswell 22—Hetton 22—Stewart's 22—North Hetton Lyon's 19 6—Lambton 22—Russell's Hetton 21 9—Caradoc 22 3—Hartlepool 22—Kelloe 21 9—Adelaide 21 6—Evenwood 17—Hartley 18—Howard's Netherton Main 16 3—Devonshire 19.—Ships arrived, 76.

PRICES OF MINING SHARES.

Shares.	BRITISH MINES.	Paid.	Price	Shares.	BRITISH MINES.	Paid.	Price
500	Anglesey	5	8	4,000	United Hills	5	9
4,000	Bissoe Bridge	5	1	6,000	Wicklow Copper	5	10½
8,000	Blaenavon	45	40	3,848	West Wheal Jewel	8	4½
20,000	British Iron	60	64d	1,000	Wheal Julia	—	6½
100	Copper Bottom	41	30	3,300	Wheal Leeds	½	—
2,000	Cornubian Lead Co.	3½	1		FOREIGN MINES.		
6,000	Cornwall Great United	10½	1	5,000	Alten Mining Company	12½	11
1,000	Cuddra	10	1	10,000	Anglo Mexican Co.	100	1½
5,000	Dartmoor Consols	5	1	3,374	Do. Subscription	25	1
10,000	DurhamCountyCoalCo.	37	—	2,000	Bolanos	150	27½
2,000	Danescombe	—	2½		Ditto Scrip	15	17½
2,000	De Dunstanville	—	—	10,000	Brazilian Imperial	20	5 7
1,000	Duffield	20	10	10,000	Bolivar	20	½
1,200	East Mulberry Hills	3½	1	10,000	Ditto Scrip	10	2
3,200	Great Wh. Prosper	7½	6½	10,000	Cata Branca / Concepcao — Brazilian Co.	6½	7
4,000	Great Wh. Charlotte	3	1			4	—
10,000	Hibernian	12½	3	12,000	Cobre CopperCompany	40	31½
1,000	Holmbush	14	40	8,500	Colombian Co. regis.	55	2
2,000	Isle of Sark (Guernsey)	10½	13	6,000	Copiapo Mining Co.	13½	9½
10,000	Mining Co. of Ireland	7	16½	20,000	General Mining Asso.	18	3
6,000	Polbreen	4	1	5,851	Mexican Company	50	2½
2,000	Reliatian	—	1½	12,000	Mocanzas and Cocaes	25	6
5,000	Redmoor Consolidated	5	1½	14,582	Real del Monte, regis.	3½	2½
10,000	Rhymney Iron	50	25		Do. unregistered	—	1½
800	South Towan	10	1		Ditto Loan Notes	150	160
4,000	Tregollan	4	½				
4,000	Treleigh Consols	4½	1½	7,000	Royal Santiago	10	15
4,305	Tamar Consols	3	2	11,000	St. John d'el Rey	14½	2½
6,000	Tin Croft	6½	4½	10,000	United Mexican	40	2½
194	Trevaskus	60	50		Black Scrip, addl capital	5	3
4,300	Tretoil	1½	3		Red New Scrip	5	4½

RAILWAY SHARE LIST AND TRAFFIC RETURNS.

Line.	Entire Lgth.	Now Open.	Cost.	Pd. on Share.	Val. of Share.	Last week's Returns.		
Birmingham & Derby Junc.†	48	38½	£1,036,008	100	70	1008	9	3
Birmingham and Gloucester	52½	5 ½	1,168,086	100	78	1333	2	10
Dundee and Arbroath	16⅞	16⅞	124,384	25	27	310	7	9
Eastern Counties*	126½	17½	2,133,333	25	9	879	4	4
Glasgow and Ayr	51	40	1,033,000	40	39	734	9	4
Glasgow and Paisley Joint	6⅞	6⅞	250,000	23	23½	398	17	9
Grand Junction	97½	97½	1,908,000	100	204	7305	5	5
Great North of England	75	45	1,300,000	80	65	984	0	3½
Great Western	117	92	5,730,000	65	92½	6133	9	4
Hull and Selby	31	31	333,381	50	43½	840	1	9
Lancaster & Preston Junc.	20½	20½	430,000	42½	31½	481	11	11
Liverpool and Manchester	31	31	1,673,000	100	188	4433	13	11
London and Birmingham	112½	112½	5,360,000	90	153½	14000	3	4
London and Blackwall	3½	3½	800,000	25	19½	300	10	4
London and Brighton	46½	3½	2,400,000	50	46	117	0	4
London and Croydon	10½	10½	700,000	13⅞	13⅞	330	17	9½
London and Greenwich	3¾	3¾	1,073,000	20	7⅞	905	16	10
London and South Western	93	76½	2,280,000	39⅞	54½	3847	16	3½
Manchester, Bolton, & Bury	10	10	640,000	90	35	376	19	5
Manchester & Birmingham	45	3	2,800,000	40	23½	348	18	6
Manchester and Leeds	50	10	2,500,000	70	66	3676	0	1
Maryport and Carlisle	28	7	240,000	50	47	...		
Midland Counties	57	57	1,333,000	100	88	2080	10	1
Newcastle and Carlisle	60½	60½	750,000	100	107	1840	1	1
Northern and Eastern††	32½	19½	1,200,000	30	30	833	0	0
North Midland‡	72⅞	72⅞	3,000,000	100	77	2904	3	0½
North Union§	23	23	670,000	75	80	900	18	0
Preston and Wyre	19½	19½	280,000	50	30	248	18	1
Sh. Field and Rotherham	5½	5½	200,000	25	31	...		
Ulster	30	8	800,000	22⅞	—	180	9	6
York and North Midland	23	23	470,000	50	79½	1101	5	0

* Including Northern and Eastern Railway toll. † Net total, 604l. 11s. 7d. ‡ Exclusive of the Manchester and Leeds toll. § The Liverpool and Manchester toll deducted. †† Rent and toll to Eastern Counties (about 116l. per week) included in the returns.

METEOROLOGICAL JOURNAL, 1841.

	March	Thermometer		Barometer			March	Thermometer		Barometer	
Thursd.	25	29	to 57	30,00	to 29,82	Monday	29	45	56	29,60	29,77
Friday	26	29	62	29,97	29,14	Tuesday	30	38	57	29,77	29,94
Saturd.	27	37	58	29,63	29,61	Wednes.	31	39	53	29,39	29,30
Sunday	28	29	55	29,60	29,60						

Winds S. and S.W.

On the 25th, morning overcast, otherwise clear; the 26th, generally clear, rain in the afternoon; the 27th, morning cloudy, otherwise clear; the 28th, generally clear; the 29th, cloudy, raining very fast during the evening; the 30th, morning clear, otherwise cloudy, a little rain in the afternoon; the 31st, morning clear, otherwise cloudy, raining frequently during the evening.

Rain fallen ,275 of an inch.

Edmonton. CHARLES HENRY ADAMS.

London: Printed and Published by Henry English, the Proprietor, at his Office, No. 57, New Broad-street, in the city of London; where all Communications and Advertisements are requested to be forwarded, post-paid. [April 3, 1841.